PUBLIC NOTICE
LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY (LDEQ)
THE DOW CHEMICAL COMPANY/ LOUISIANA OPERATIONS
PUBLIC HEARING AND REQUEST FOR PUBLIC COMMENT ON THE DRAFT HAZARDOUS WASTE OPERATING RENEWAL PERMIT

The LDEQ, Office of Environmental Services, will conduct a public hearing to receive comments on the draft hazardous waste operating renewal permit for The Dow Chemical Company (Dow), Lousiana Operations, P.O. Box 150, Plaquemine, Louisiana 70765 for the Plaquemine Facility. **The facility is located at 21255 LA Highway 405, Plaquemine, Iberville Parish.**

The hearing will be held on Monday, September 8, 2008, beginning at 6:00 p.m., at the Iberville Parish Council Meeting Room on the 2nd Floor, Courthouse Building, located at 58050 Meriam Street Plaquemine, LA 70765. During the hearing, all interested persons will have an opportunity to comment on the draft permit.

Dow requested to renew its hazardous waste operating permit governing the operation of: thirteen (13) hazardous waste tanks; five (5) container storage areas; six (6) hazardous waste thermal treatment units; one (1) operational hazardous waste land disposal unit; and one (1) post-closure hazardous waste land disposal unit/corrective action management unit at its Plaquemine Facility. Dow's Plaquemine facility generates hazardous wastes incidental to its chemical manufacturing operations. After generation, all of Dow's hazardous wastes are stored onsite before ultimate onsite or offsite treatment or disposal. Under the proposed draft hazardous waste operating renewal permit, the receipt, storage, treatment, and/or disposal of offsite generated hazardous wastes is prohibitted.

Dow's Plaquemine Facility manufactures both organic and inorganic compounds such as: sodium hydroxide, chlorine, ethylene, propylene, polyethylene, vinyl chloride monomer (VCM), benzene, ethylene oxide, propylene oxide, glycol, glycol ethers, substituted cellulose, and various chlorinated hydrocarbon products. Dow's multiple chemical production processes generate various hazardous wastes incidental to process operations. Dow's thirteen (13) hazardous waste tanks are utilized for the storage of numerous onsite generated hazardous wastes. Most generated liquid hazardous waste streams are treated onsite in Dow's six (6) RCRA permitted thermal treatment units. Ash and residues generated by the combusiton of hazardous wastes in the thermal treatment units are classified as hazardous waste. Ash and residues removed from the thermal treatment units are disposed of in the permitted Block 80 hazarodus waste landfill.

The proposed draft hazardous waste operating renewal permit also includes permit conditions governing Dow's groundwater protection and monitoring programs for two (2) permitted land disposal units: the active Block 80 hazardous waste landfill and the closed Northwest Landfill/Corrective Action Management Unit (NWLF/CAMU). The NWLF/CAMU is currently permitted under a hazardous waste CAMU permit (LAD008187080-CAMU-1). If, after the end of the public comment period, LDEQ renders a decision to issue the hazarous waste operating renewal permit, the CAMU permit will be terminated. Specific information regarding all hazardous waste permitted units, required plans, and site conditions can be found in the: hazardous waste operating permit renewal application; the reponses to the notices of deficiencies, and the draft hazardous waste operating renewal permit.

Written comments or written requests for notification of the final permit decision regarding this permit may also be submitted to Ms. Soumaya Ghosn at LDEQ, Public Participation Group, P.O. Box 4313, Baton Rouge, LA

70821-4313. **Written comments and/or written requests for notification must be received by 12:30 p.m., Wednesday, September 10, 2008.** Written comments will be considered prior to a final permit decision.

LDEQ will send notification of the final permit decision to the applicant and to each person who has submitted written comments or a written request for notification of the final decision.

The permit renewal application, reponses to the notices of deficiencies, and draft hazardous waste operating renewal permit are available for review at the LDEQ, Public Records Center, Room 127, 602 North 5th Street, Baton Rouge, LA. Viewing hours are from 8:00 a.m. to 4:30 p.m., Monday through Friday (except holidays). **The available information can also be accessed electronically on the Electronic Document Management System (EDMS) on the DEQ public website at www.deq.louisiana.gov.**

Additional copies may be reviewed at the Iberville Parish Library, Parish Headquaters Library, 24605 J. Gerald Berret Blvd., Plaquemine, Louisiana 70764-0736 and the West Baton Rouge Parish Library, 830 North Alexander, Port Allen, Louisiana 70767-2327.

Previous notices have been published in the The Advocate, The West Side Journal and in the Plaquemine Post South on January 13, 2000

Individuals with a disability, who need an accommodation in order to participate in the public hearing, should contact Ms. Dina Heidar at the above address or by phone at (225) 219-3278.

Inquiries or requests for additional information regarding this permit action should be directed to Mr. Craig Easley, LDEQ, Waste Permits Division, P.O. Box 4313, Baton Rouge, LA 70821-4313, phone (225) 219-3050.

Persons wishing to be included on the LDEQ permit public notice mailing list or for other public participation related questions should contact the Public Participation Group in writing at LDEQ, P.O. Box 4313, Baton Rouge, LA 70821-4313, by email at deqmaillistrequest@la.gov or contact the LDEQ Customer Service Center at (225) 219-LDEQ (219-5337).

Permit public notices including electronic access to the draft permit and associated information can be viewed at the LDEQ permits public notice webpage at www.deq.louisiana.gov/apps/pubNotice/default.asp and general information related to the public participation in permitting activities can be viewed at www.deq.louisiana.gov/portal/tabid/2198/Default.aspx

Alternatively, individuals may elect to receive the permit public notices via email by subscribing to the LDEQ permits public notice List Server at www.doa.louisiana.gov/oes/listservpagc/ldeq_pn_listserv.htm

All correspondence should specify AI Number 1409, Permit Number LAD008187080-OP-1-RN-1, and Activity Number PER19980003.

Scheduled Publication Date: Thursday, July 24, 2008

DRAFT
HAZARDOUS WASTE OPERATING PERMIT

THE DOW CHEMICAL COMPANY
PLAQUEMINE, LOUISIANA
LAD00818708-OP-1-RN-1
AI#1409 / PER19980003

RECORD CENTER COPY

BOBBY JINDAL
GOVERNOR

HAROLD LEGGETT, PH.D.
SECRETARY

State of Louisiana

DEPARTMENT OF ENVIRONMENTAL QUALITY
ENVIRONMENTAL SERVICES

JUL 24 2008

Ms. Lisa Perry
EH&S
The Dow Chemical Company, Louisiana Operations
P.O. Box 150
Plaquemine, LA 70765-0150

RE: Draft Hazardous Waste Operating Renewal Permit
The Dow Chemical Company (Dow) – Plaquemine Facility
AI#1409 / LAD 008 187 080 / PER19980003

Dear Ms. Perry:

Attached is Dow's copy of the draft hazardous waste operating renewal permit for Dow's Plaquemine Facility, LAD008187080-OP-RN-1, which contains language pertaining to the operation of hazardous waste storage tanks, container storage areas, thermal treatment units, and the Block 80 Hazardous Waste Landfill. The draft hazardous waste operating renewal permit also contains language governing the post-closure care of the Northwest Landfill/Corrective Action Management Unit (NWLF/CAMU). The NWLF/CAMU is currently permitted under an effective CAMU permit (Permit Number LAD008187080-CAMU-1). If, after the end of the public comment period, the Administrative Authority renders a decision to issue the hazardous waste operating renewal permit, the CAMU permit will be terminated.

A comment period of forty-five (45) days will be allowed in order for the public to review and comment on this draft renewal hazardous waste operating renewal permit. A public hearing will also be scheduled at least forty-five (45) days after the date on which the public notice is given. Specific dates for the beginning and ending of the comment period are contained in the attached public notice.

Prior to taking a final action on the draft hazardous waste operating renewal permit, the Administrative Authority will consider all significant comments submitted on this action. Written comments must be submitted no later than 12:30 p.m. on the final day of the comment period. The issuance of the final permit decision will be in accordance with LAC 33:V.705.

Please reference your Agency Interest Number (1409), EPA ID Number (LAD008187080), and Permit Activity Number 19980003 on all future correspondence pertaining to this matter. If you have any questions, please contact Mr. Craig Easley of the Waste Services Section at (225) 219-3050 or Ms. Soumaya Ghosn of the Public Participation Group at (225) 219-3276.

Sincerely,

Bijan Sharafkhani, P.E.
Administrator
Waste Permits Division

kce

Attachment

c: Kishor Fruitwala – EPA Region 6

FACT SHEET

FACT SHEET

DRAFT HAZARDOUS WASTE OPERATING RENEWAL PERMIT
PREPARED FOR

THE DOW CHEMICAL COMPANY
Louisiana Operations

EPA ID# LAD008187080
Agency Interest # 1409
PER19980003

Plaquemine, Louisiana
Iberville Parish

Permit Number LAD008187080-OP-1-RN-1

I. INTRODUCTION

This fact sheet has been developed in accordance with the Louisiana Administrative Code (LAC) 33:V.703.D and briefly sets forth principal and significant facts, legal, methodological and policy requirements of the proposed draft hazardous waste operating renewal permit for The Dow Chemical Company (Dow), Louisiana Operations facility, EPA ID Number LAD008187080, Agency Interest Number 1409, for the facility located in Plaquemine, Iberville Parish, Louisiana.

The Louisiana Department of Environmental Quality (LDEQ) has prepared this proposed draft hazardous waste operating renewal permit to meet the requirements of LAC Title 33, Part V, Subpart 1 and the Federal Resource Conservation and Recovery Act (RCRA) as amended by the 1984 Hazardous and Solid Waste Amendments (HSWA).

Dow is seeking a hazardous waste operating renewal permit for the operation of: thirteen (13) hazardous waste tanks; five (5) container storage areas; six (6) hazardous waste thermal treatment units; one (1) operational hazardous waste land disposal unit; and one (1) post-closure hazardous waste land disposal unit/corrective action management unit at its Louisiana Operations facility in Plaquemine, Louisiana.

Dow has initiated clean closure activities for the following hazardous waste units in its Environmental Operations Plant: the Environmental Operations Plant Thermal Treatment Unit (rotary kiln I-200); the hazardous waste storage tanks T-130, T-135, and T-255; and the hazardous waste secondary containment sumps SU-130 and SU-265. The secondary containment sumps SU-130 and SU-265 are not permitted hazardous waste units but provide secondary containment capacity for hazardous waste storage tanks T-130, T-135, and T-255. The approved closure plan for hazardous waste storage tanks T-130, T-135, and T-255 requires the clean closure of the associated secondary containment structures (SU-130 and SU-265). Due to the fact the Environmental

Operations Plant hazardous waste units are in the process of being clean closed and no longer actively managing hazardous waste, conditions in the draft hazardous waste operating renewal permit pertaining to these units address the ongoing closure activities and subsequent clean closure certification and verification rather than operational conditions.

Dow is also seeking to consolidate its current hazardous waste operating permit (Permit Number LAD008187080-OP-1) and its Corrective Action Management Unit (CAMU) permit (Permit Number LAD008187080-CAMU-1). The CAMU permit for the Northwest Landfill/CAMU became effective on June 3, 2002 and was separate from Dow's hazardous waste operating permit. Under the terms and conditions of the CAMU permit, Dow disposed of remedial wastes containing hazardous constituents resulting from onsite corrective action activities in its onsite hazardous waste Northwest Landfill (under the CAMU permit the landfill was re-designated as the Northwest Landfill/CAMU). Following the completion of corrective action activities managed under the CAMU permit, Dow submitted a closure certification report for the Northwest Landfill/CAMU to LDEQ dated January 17, 2007. LDEQ verified closure of the unit in correspondence dated May 8, 2007.

Therefore, this draft hazardous waste operating renewal permit includes permit conditions governing the post-closure care, inspection, and groundwater monitoring program for the closed Northwest Landfill/CAMU. The consolidation of the hazardous waste operating permit and CAMU permit will allow for an integrated and comprehensive groundwater protection and monitoring program for Dow's hazardous waste land disposal units.

II. THE PERMITTING PROCESS

The purpose of this fact sheet is to initiate the permit decision process. The LDEQ's Office of Environmental Services - Waste Permits Division (OES-WPD) is required to prepare this draft hazardous waste operating renewal permit. The draft hazardous waste operating renewal permit sets forth all applicable conditions, which the Permittee is required to comply with during the life of the permit. Dow submitted its Hazardous Waste Part B Operating Renewal Permit Application, dated October 30, 1998, to comply with the Environmental Protection Agency (EPA) regulations requiring hazardous waste units to be permitted under Subtitle C of the Resource Conservation and Recovery Act (RCRA).

The permitting process will afford the LDEQ, interested citizens, and other agencies the opportunity to evaluate the ability of the Permittee to comply with the requirements of the LAC 33:V.Subpart 1, and the Hazardous and Solid Waste Amendments (HSWA) portion.

The public is given a minimum of forty-five (45) days to review and comment on the draft hazardous waste operating renewal permit. The Administrative Authority, prior to making a decision or taking any final action on the draft permit, will consider all significant comments. The decision of the Administrative Authority shall be to issue, deny, modify, or revoke the draft hazardous waste operating renewal permit in accordance with LAC 33:V.705.

A. NEW DRAFT HAZARDOUS WASTE PERMIT

The Waste Permits Division reviewed the Part B renewal permit application, subsequent application revisions, and other pertinent technical information and prepared a draft permit that contains the language that pertains to the operation, maintenance, closure, and post-closure care of the listed facilities.

The draft hazardous waste operating renewal permit is a tentative determination and is not the final decision of the Administrative Authority.

B. PUBLIC COMMENT PERIOD

LAC 33:V.715 requires that the public be given at least forty-five (45) days to comment on a draft permit decision. The specific dates for the opening and closing of the public comment period are contained in the public notice that was issued for this particular permitting action. Any person interested in commenting on the draft hazardous waste operating renewal permit for The Dow Chemical Company's, LLC – Louisiana Operations facility (in Plaquemine, LA) must do so within the allotted forty-five (45) day comment period.

A public hearing for the draft permit will be held on the date, and at the location and time provided in the public notice (see the attached notice in the Public Participation Section of the draft hazardous waste operating renewal permit). LDEQ will hold the hearing within forty-five (45) days after the date on which the public notice is given.

Public notice of the proposed permitting action and of the hearing shall be published in specified newspapers, announced on the designated radio station, and mailed to those persons contained on the facility's mailing list.

C. LOCATIONS OF AVAILABLE INFORMATION

The administrative record, including all supporting documents, is on file at the LDEQ Public Records Center, Room 1-127, 602 North 5th Street, Baton Rouge, Louisiana. These documents may be inspected and copied (at $0.25 per copy page) at any time between the hours of 8:00 to 4:30 p.m., Monday through Friday (except holidays).

In addition, a copy of the draft operating renewal permit, fact sheet, and supporting documents are available for review at the **Iberville Parish Library, Parish Headquarters Library, 24605 J. Gerald Berret Blvd., Plaquemine, Louisiana 70764-0736 and the West Baton Rouge Parish Library, 830 North Alexander, Port Allen, Louisiana 70767-2327.**

D. WRITTEN COMMENT SUBMISSION

Interested persons may submit written comments on the draft operating renewal permit to the Administrative Authority, at the address listed below, no later than 12:30 p.m., by the closing date of the comment period. All comments should include:

1. the name and address of the commenter,

2. a concise statement of the exact basis for any comment and supporting relevant facts upon which the comment is based,

3. identification of the facility commented on (the EPA Identification Number and AI number), and

4. supporting relevant facts upon which the comments are based.

All comments, further requests for information (including copies of this decision and fact sheet) and any requests by public interest groups or individuals, who would like to be included in the mailing list, should be made in writing to:

Ms. Soumaya Ghosn (soumaya.ghosn@la.gov)
Louisiana Department of Environmental Quality
Office of Environmental Services
Post Office Box 4313
Baton Rouge, Louisiana 70821-4313
(225) 219-3276 or fax (225) 219-3309

Any technical questions regarding this draft hazardous waste operating renewal permit should be addressed to:

Mr. K. Craig Easley (craig.easley@la.gov)
Louisiana Department of Environmental Quality
Office of Environmental Services
Waste Permits Division
Post Office Box 4313
Baton Rouge, LA 70821-4313
(225) 219-3050 or fax (225) 219-3158

III. DESCRIPTION OF OVERALL SITE

Dow is the owner and operator of the Louisiana Operations facility in Plaquemine, Louisiana. The facility manufactures both organic and inorganic compounds such as: sodium hydroxide, chlorine, ethylene, propylene, polyethylene vinyl chloride monomer (VCM), benzene, ethylene oxide, propylene oxide, and various chlorinated hydrocarbon products. The facility began operations in 1958. Dow's Plaquemine facility generates hazardous wastes incidental to its chemical

manufacturing operations. After generation, all of Dow's hazardous wastes are stored onsite before ultimate treatment or disposal onsite or offsite.

IV. HAZARDOUS WASTE FACILITIES

Dow is seeking a hazardous waste operating renewal permit for the operation of: thirteen (13) hazardous waste tanks; five (5) container storage areas; six (6) hazardous waste thermal treatment units; one (1) operational hazardous waste land disposal unit; and one (1) post-closure hazardous waste land disposal unit/corrective action management unit at its Louisiana Operations facility in Plaquemine, Louisiana.

A brief description of each permitted hazardous waste unit follows.

HAZARDOUS WASTE STORAGE TANKS

All permitted hazardous waste storage tanks are equipped with secondary containment, level control, alarm systems, and emission control devices. In addition, Dow has operational and inspection procedures in place to ensure that hazardous waste tank systems are operated and maintained in accordance with all applicable state and federal regulations and the terms and conditions specified in the draft hazardous waste operating permit. These engineered and procedural safeguards minimize the potential for releases to the environment from the permitted tank systems.

Tanks T-130, T-135, and T-255 are located within a common secondary containment system in the Environmental Operations Plant. Dow has initiated clean closure activities for these hazardous waste storage tanks and the shared secondary containment system under an approved closure plan. During their operation, the tanks received hazardous wastes generated by various production and maintenance activities. Compatible hazardous waste streams were fed to the tanks on a batch basis from bulk containers. Hazardous waste material was stored in the tanks and (as quantities required) routed for treatment in the permitted Environmental Operations Plant Thermal Treatment Unit (rotary kiln I-200).

Tanks D-13 and D-15 are located within a common secondary containment system in the Solvents/Ethylene Dichloride (EDC) Plant along with non-permitted Solvents/EDC process storage tanks. Tanks D-13 and D-15 receive liquid process waste feeds generated by production operations in the Solvents/EDC Plant. Liquid hazardous waste accumulating in tank D-15 is stored and (as quantities require) routed to tank D-13 for storage prior to treatment. Liquid hazardous waste accumulating in tank D-13 is stored and (as quantities require) routed for treatment in the permitted Solvents/EDC Thermal Treatment Unit (incinerator F-700).

Tanks D-42B-1, D-92-A, D-700, and D-701 are located within a common secondary containment system along with the permitted Solvents/EDC Thermal Treatment Unit (incinerator F-700). The tanks receive liquid waste streams generated by several onsite production processes. Liquid hazardous waste accumulating in tanks is stored and (as quantities require) routed for treatment in

the permitted Solvents/EDC Thermal Treatment Unit (incinerator F-700).

Tanks T-400-2 and T-410 are located within the Vinyl II Plant. Tank T-400-2 primarily receives heavy ends resulting from the production and distillation of EDC and vinyl chloride. Tank T-410 primarily receives waste generated during maintenance activities and which is fed by transfers from containers that are either poured or pumped into the tank. Liquid hazardous waste accumulating in tanks T-400-2 and T-410 is stored and (as quantities require) routed for treatment in the Vinyl II Thermal Treatment Units (boilers F-410 and F-420).

Tanks D-750 and D-751 are located within a common secondary containment system in the Chlorinated Methanes Plant. Tanks D-750 and D-751 receive liquid hazardous waste streams resulting from production operations in the Chlorinated Methanes Plant. Liquid hazardous waste accumulating in tanks D-750 and D-751 is stored and (as quantities require) routed for treatment in the Chlorinated Methanes Plant Thermal Treatment Unit (boiler R-750).

CONTAINER STORAGE AREAS

Dow has five (5) container storage areas (CSAs) utilized for storage of containerized hazardous waste in excess of ninety (90) days. All five (5) CSAs are located at the Environmental Operations Plant. Under its original hazardous waste operating permit issued in 1989, Dow was permitted for five (5) CSAs that were designated as: CSA #1, CSA #2, CSA #3, CSA #4, and CSA #5. Dow submitted closure certification for CSA #4 in 1998 and LDEQ confirmed clean closure of CSA #4 in correspondence dated August 4, 2004. Based upon information provided in Dow's permit renewal application, the configuration and names of the CSAs have been revised as follows: CSA #1 is now CSA A; CSA #2 is now CSA B and CSA C; CSA #3 is now CSA D; and CSA #5 is now CSA E.

CSAs A, B, C, and D are permitted for the storage of containers containing no free liquids. CSA E, which is equipped with a secondary containment system, is permitted to store hazardous wastes containing free liquids.

HAZARDOUS WASTE THERMAL TREATMENT UNITS

Dow has six (6) permitted thermal treatment units (TTUs) utilized for the onsite treatment of hazardous waste generated incidental to operations at Dow's Louisiana Operations facility in Plaquemine, Louisiana. Under the original hazardous waste operating permit issued in 1989, Dow was permitted to receive hazardous and solid wastes generated offsite by other Dow facilities and Dow subsidiaries for thermal treatment in the Environmental Operations Plant TTU (rotary kiln I-200). As a public service to the community, Dow also received intermittent approvals from LDEQ to receive and treat (in I-200) offsite waste generated during hazardous household material collection day events from surrounding parishes and contraband waste generated incidental to local law enforcement operations. In August 2007, Dow submitted a notification of intent to close and revised closure plan for its hazardous waste permitted units in its Environmental Operations Plant. LDEQ approved the revised closure plan in correspondence dated March 4, 2008. Dow has initiated

ongoing clean closure activities for the hazardous waste units in its Environmental Operations Plant (including I-200).

Due to closure activities completed to date, I-200 is inoperable and no longer manages hazardous waste. Therefore, the terms and conditions of the draft hazardous waste operating renewal permit no longer address operational conditions associated with I-200 but instead include specific requirements associated with ongoing closure activities and the subsequent closure certification. Due to the fact that offsite generated waste streams will no longer be treated in I-200, the draft hazardous waste operating renewal permit contains conditions prohibiting the receipt of hazardous waste from offsite sources.

Two (2) of the TTUs, I-200 and F-700 (as noted above, I-200 is inoperable and is undergoing closure), are classified as hazardous waste incinerators in accordance with LAC 33:V.Chapter 31. Four of the TTUs, R-4, R-750, F-410, and F-420, are classified as industrial hazardous waste boilers in accordance with LAC 33:V.Chapter 30.

All permitted TTUs are operated with a series of automatic waste feed cut-offs (AWFCOs) that terminate hazardous waste feeds to the combustion units when conditions deviate from the limits established in the permit that ensure complete combustion and compliance with performance standards. Furthermore, all TTUs are equipped with air pollution control devices (e.g., scrubbers, draft fans, etc.) and combustion gas monitoring systems. In addition, Dow has operation and inspection procedures in place to ensure that all TTUs are operated and maintained in a manner consistent with all applicable state and federal regulations, as well as the terms and conditions specified in the draft hazardous waste operating renewal permit. These engineered and procedural safeguards (when properly implemented and maintained) serve to ensure emissions from the permitted TTUs are in compliance with established hazardous waste and/or air permit limits. Detailed information regarding the waste streams fed to the TTUs, TTU operating parameters, and the engineering specifications for the TTUs and their ancillary systems can be found in Dow's permit renewal application and other documents associated with the draft hazardous waste operating renewal permit.

Environmental Operations Plant TTU (I-200), as previously noted, I-200 is currently undergoing closure and is currently inoperable. The draft hazardous waste operating permit contains conditions associated with execution of closure and closure certification. I-200 will remain a hazardous waste permitted unit until clean closure is verified by LDEQ.

Solvents/EDC TTU (F-700) is a horizontally fired hazardous waste incinerator located in the Solvents/EDC plant. F-700 treats hazardous wastes generated by several plant operations including bulk liquids from hazardous waste storage tanks, hazardous waste fed directly from production operations, liquids from containers, and tank and process vents. F-700 does not recover heat energy generated from the combustion of hazardous waste and supplementary fuel feeds.

Glycol I TTU (R-4) is a horizontal fire-tube hazardous waste boiler located in the Glycol I Plant. R-4 has previously been operated under the interim status Boiler and Industrial Furnace (BIF) regulations. The draft hazardous waste operating renewal permit includes conditions and operating limits pertaining to R-4. R-4 will become a RCRA permitted boiler if and when the hazardous waste operating renewal permit becomes final and effective. R-4 treats hazardous wastes generated by Glycol I production operations, as well as process vent streams generated by other plant processes. Combustion gases pass through a hydrogen chloride (HCl) absorber and chlorine (Cl_2) scrubber prior to exiting through a dedicated exhaust stack. Heat energy generated from the combustion of hazardous waste and supplementary fuel feeds is recovered and utilized in the production of steam, which is utilized as a resource by other facility operations.

Chlorinated Methanes Plant TTU (R-750) is a horizontal fire-tube hazardous waste boiler located in the Chlorinated Methanes Plant. R-750 has previously been operated under the interim status Boiler and Industrial Furnace (BIF) regulations. The draft hazardous waste operating renewal permit includes conditions and operating limits pertaining to R-750. R-750 will become a RCRA permitted boiler if and when the hazardous waste operating renewal permit becomes final and effective. R-750 treats hazardous wastes generated by Chlorinated Methanes Plant and Methocel Plant production operations, as well as process vent streams generated by other plant processes. Combustion gases pass through a hydrogen chloride (HCl) absorber and chlorine (Cl_2) scrubber prior to exiting through a dedicated exhaust stack. Heat energy generated from the combustion of hazardous waste and supplementary fuel feeds is recovered and utilized in the production of steam, which is utilized as a resource by other facility operations.

Vinyl II TTUs (F-410 and F-420) are horizontal fire-tube hazardous waste boilers located in the Vinyl II Plant. F-410 and F-420 have previously been operated under the interim status Boiler and Industrial Furnace (BIF) regulations. The draft hazardous waste operating renewal permit includes conditions and operating limits pertaining to both F-410 and F-420. F-410 and F-420 will become RCRA permitted boilers if and when the hazardous waste operating renewal permit becomes final and effective. Both F-410 and F-420 primarily treat hazardous wastes generated by Vinyl II production operations. F-410 and F-420 also treat hazardous and non-hazardous waste streams from other plant production process and process vents. Combustion gases pass through a hydrogen chloride (HCl) absorber and chlorine (CL_2) scrubber prior to exiting through a dedicated exhaust stack. Heat energy resulting from the combustion of hazardous waste and supplementary fuel feeds is recovered and utilized in the production of steam, which is utilized as a resource by other facility operations.

LAND DISPOSAL UNITS

Dow is responsible for two (2) onsite RCRA permitted land disposal units that either receive or have received hazardous waste: the operational Block 80 Hazardous Waste Landfill (or Block 80 HWLF) and the closed Northwest Landfill/CAMU (or NWLF/CAMU). Unit specific details and information is provided in the unit descriptions below. In accordance with LAC 33:V.Chapter 33, Dow is required to conduct groundwater protection and monitoring programs for both RCRA permitted land

disposal units. Currently, Dow implements two separate groundwater protection and monitoring programs. One program is associated with the Block 80 HWLF and is managed under the current administratively continued hazardous waste operating permit (permit number LAD008187080-OP-1). The other program is associated with the NWLF/CAMU and is managed under the current corrective action management unit (CAMU) permit which became effective on June 3, 2002 (permit number LAD008187080-CAMU-1).

The draft hazardous waste operating renewal permit consolidates the hazardous waste operating permit and the CAMU permit into one comprehensive hazardous waste operating permit governing all onsite RCRA permitted hazardous waste units. The consolidation of the two previously separate permits will allow for an integrated and comprehensive groundwater protection and monitoring program governing both land disposal units. However, due to the fact that the NWLF/CAMU was verified closed by LDEQ in correspondence dated May 8, 2007, the draft hazardous waste operating renewal permit includes permit conditions governing the post-closure care, inspection, and groundwater monitoring of the NWLF/CAMU.

The **Block 80 Hazardous Waste Landfill (or Block 80 HWLF)** is operational and continues to receive hazardous waste ash from the onsite TTUs. The ash disposed of in Block 80 HWLF is classified as hazardous waste due to the fact that it is derived from the thermal treatment of listed and characteristic hazardous wastes. Under the draft hazardous waste operating renewal permit, Block 80 HWLF will also be permitted to receive non-hazardous debris originating from the onsite TTUs during turnaround and/or closure activities (e.g., refractory, fiberglass, and column packing) on a case-by-case basis and with prior written approval from LDEQ.

The nature of the waste disposed of in the Block 80 HWLF does not require the application of daily cover. However, the filling operation of the Block 80 HWLF utilizes a "moving face" concept. As sections of each "phase cell" reach design grades the area is capped with: two feet of compacted clay; an 80-mil high density polyethylene membrane (with a geotextile cushion); a geotextile protected drainage net; and eighteen inches of topsoil seeded with grasses.

The construction and utilization of the Block 80 HWLF will occur in three phases. The first phase (Phase I) began operation in 1991. The Phase I Landfill Cell remains active. The dimensions of the Phase I Landfill Cell are 364 feet by 300 feet and at completion will have a maximum height of approximately 44 feet above grade. The Phase II and Phase III Landfill Cells will be constructed as additional disposal capacity is required. The dimensions of both the Phase II and Phase III Landfill Cells will be 364 feet by 150 feet and at completion will have a maximum height of approximately 44 feet above grade.

Dow implements a groundwater protection and monitoring program for the Block 80 HWLF in accordance with LAC 33:V.Chapter 33. The groundwater monitoring well network for the Block 80 HWLF is comprised of five (5) monitoring wells (one upgradient well and four downgradient wells) screened in the first pervious groundwater zone (or "shallow pervious zone"). To date, there have been no statistically significant detections of hazardous constituents in the shallow pervious zone

groundwater; therefore, the Block 80 HWLF remains in the detection monitoring program as described in LAC 33:V.3317.

The **NWLF/CAMU** is a closed hazardous waste land disposal unit. The unit was originally called the Northwest Landfill and was operated as a hazardous waste landfill. During its operation, the Northwest Landfill received a variety of non-hazardous and hazardous waste streams but primarily received ash and particulates from the Environmental Operations TTU. As previously noted, Dow received a CAMU permit in June 2002. Under the CAMU permit LAD008187080-CAMU-1, the newly designated NWLF/CAMU was permitted to receive contaminated soil generated by corrective action activities associated with the "Lighthouse Road" and "700 Railyard" corrective action sites. The groundwater monitoring well network for the NWLF/CAMU is comprised of eight (8) monitoring wells (two upgradient wells, five downgradient wells, and one Plaquemine Aquifer monitoring well). Seven (7) monitoring wells are screened in the "deep pervious zone" and one (1) monitoring well is screened in the upper sands of the Plaquemine Aquifer. To date, there have been no statistically significant detections of hazardous constituents in the shallow pervious zone groundwater; therefore, the NWLF/CAMU remains in the detection monitoring program as described in LAC 33:V.3317.

V. FINANCIAL AND LIABILITY REQUIREMENTS

Dow has submitted documentation to satisfy the financial assurance and liability requirements of LAC 33:V.Chapter 37. However, due to revisions to the closure and post-closure cost estimates required during the permit application review process, Dow must revise the information included in its financial test to address increases in the dollar amount of the revised cost estimates. Dow must submit the revised financial test documentation for LDEQ approval in accordance with the timeline specified in the draft hazardous waste operating renewal permit schedule of compliance (Condition II.E.25).

VI. SUMMARY OF ENVIRONMENTAL FACTORS CONSIDERED

In accordance with the requirements set forth by the Louisiana Supreme Court in Save Ourselves v. La. Envtl. Control Commission, 1152, (La. 1983), the LDEQ has considered the following factors in the draft decision of this hazardous waste operating permit renewal. This is a preliminary analysis based on information currently available to the LDEQ and upon Dow's responses to the IT Analysis questions included in its hazardous waste permit renewal application.

A. The potential and real adverse environmental effects of the proposed project have been avoided to the maximum extent possible.

The potential for releases or adverse environmental impacts due to Dow's onsite production operations and hazardous waste management are a legitimate concern. However, Dow has in place numerous engineered and operational safeguards (as noted in the unit descriptions

provided in Part IV of this fact sheet) which serve to minimize the potential for adverse environmental impacts to the maximum extent practical.

Dow's production units and hazardous waste management units are designed, constructed, and operated to meet or exceed state and federal requirements. Dow utilizes internal alarms to, when necessary, shut down processes at process conditions outside those required by state and federal regulations and/or permit conditions. The draft hazardous waste operating renewal permit addresses existing hazardous waste units and does not provide for the construction of new units or the expansion of existing units. The draft hazardous operating renewal permit also includes permit conditions and operating permit limits for the interim status hazardous waste boilers (R-4, R-750, F-410, and F-420) that have been previously operated under the interim status Boiler and Industrial Furnace regulations.

Furthermore, Dow has ceased operating and clean-closed many of the hazardous waste management units included in its original 1989 hazardous waste operating permit. As noted previously, Dow's decision to close the Environmental Operations TTU (I-200) will result in a reduction in facility air emissions. Also, due to the closure of I-200, Dow will no longer accept hazardous waste generated by offsite Dow facilities or Dow subsidiaries.

B. A cost benefit analysis of the environmental impact balanced against the social and economic benefits of the project demonstrates that the social and economic benefits outweigh environmental impacts.

A cost benefit analysis of the environmental impact balanced against the social and economic benefits indicates that the social and economic benefits outweigh the environmental impact. Dow employs approximately 3200 area residents (1600 Dow employees and 1600 contract employees) at its Louisiana Operations facility in Plaquemine, LA. Both the state and local economies benefit from the provision of employment and tax revenue. The annual payroll and income tax base provided by the facility is approximately $125,000,000. Dow has a policy in place to hire as many of its employees from residences as close to the facility that is practically possible.

As Dow's Louisiana Operations facility is an existing facility, the proposed hazardous waste operating renewal permit should have little or no affect on property values or public costs as they pertain to the economics of the local community. The facility is located on a very large site offering a significant buffer between its industrial activities and most public or privately held properties.

Dow is in compliance with all parish planning and zoning ordinances pertaining to non-developed buffer zones between the operating areas and all surrounding offsite areas. Furthermore, Dow maintains its own security and fire departments and does not rely on the City of Plaquemine or Iberville Parish for these services.

C. There are no alternative projects or alternative sites or mitigating measures which offer more protection to the environment than the proposed project without unduly curtailing non-environmental benefits to the extent applicable.

1. ALTERNATIVE PROJECTS

There appear to be no known alternative projects that would offer more protection to the environment than permitting the existing facilities without unduly curtailing non-environmental benefits to the extent practical. The proposed hazardous waste operating renewal permit is for existing hazardous waste units. The facility has been in operation for several decades. The permitted units are critical to the economic viability of Dow's production operations.

2. ALTERNATIVE SITE

In the preparation of responses to the IT Questions, the benefits and costs of an alternative site were considered for the management of production and hazardous waste operations. However, the costs of an alternative site outweigh the potential benefits for the following reasons:

- The proposed hazardous waste operating renewal permit is for existing hazardous waste units and the site has been in operation for several decades.
- The permitted units are critical to the economic viability of Dow's production operations. Relocating the facility's production/hazardous waste operations could result in greater environmental impact when the potential for exposure prior to and during transportation of hazardous waste is considered.
- The large volumes of waste generated due to the scope of onsite production operations, make the offsite treatment and disposal of many waste streams cost prohibitive and would pose a greater risk of exposure during transportation.

3. MITIGATING MEASURES

Dow's Plaquemine facility utilizes a system of engineered and procedural safeguards to mitigate the potential for adverse environmental impacts to the maximum extent practical. The proposed hazardous waste operating renewal permit is for existing hazardous waste units. The potential for releases to the environment is minimized due to the fact that all permitted hazardous waste units utilize engineered and operational safeguards (as noted in the unit descriptions provided in Part IV of this fact sheet).

The TTUs are operated with a series of automatic waste feed cut-offs (AWFCOs) that terminate hazardous waste feeds to the combustion units when conditions deviate from the limits established in the permit that ensure complete combustion and

compliance with performance standards. RCRA permitted land disposal units have comprehensive groundwater protection and monitoring programs in place and the results of analytical testing on sampled groundwater are reported to LDEQ on a semiannual basis. The hazardous waste tanks and hazardous waste container storage areas possess secondary containment structures that minimize the potential for releases of hazardous constituents to soil or groundwater.

There does not appear to be any additional mitigating measures which would offer more protection to the environment without unduly curtailing non-environmental benefits.

SIGNATURE PAGE

DRAFT
HAZARDOUS WASTE OPERATING RENEWAL PERMIT
FOR STORAGE, TREATMENT, DISPOSAL & POST-CLOSURE CARE

LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY

PERMITTEE: THE DOW CHEMICAL COMPANY, LOUISIANA OPERATIONS

PERMIT NUMBER: LAD008187080-OP-1-RN-1
Agency Interest Number 1409/Activity Number PER19980003

FACILITY LOCATION: 21255 LA HIGHWAY 405 SOUTH
PLAQUEMINE, LOUISIANA, 70765

This permit is issued by the Louisiana Department of Environmental Quality (LDEQ) under the authority of the Louisiana Hazardous Waste Control Law R.S. 30:2171 et seq., and the regulations adopted thereunder and under the authority of the 1984 Hazardous and Solid Waste Amendments (HSWA) to the Resource Conservation and Recovery Act (RCRA) to The Dow Chemical Company, Louisiana Operations, (hereafter called the Permittee), to operate a hazardous waste Treatment, Storage, and Disposal facility (TSD), at latitude 30° 19' 11" and longitude 91° 14' 8."

For the purposes of this permit, the "Administrative Authority" shall be the Secretary of the Louisiana Department of Environmental Quality, or his/her designee.

The Permittee must comply with all terms and conditions of this permit. This permit consists of the conditions contained herein and the applicable regulations contained in the Louisiana Administrative Code, Title 33, Part V, Subpart 1, (LAC 33:V.Subpart 1). Applicable regulations are those that are in effect on the effective date of issuance of this permit.

This permit is based on the assumption that the information provided to LDEQ by the Permittee is accurate. Further, this permit is based in part on the provisions of Sections 206, 212, and 224 of the HSWA of 1984, which modify Section 3004 and 3005 of RCRA. In particular, Section 206 requires corrective action for all releases of hazardous waste or constituents from any solid waste management unit at a treatment, storage or disposal facility seeking a permit, regardless of the time at which waste was placed in such unit.

Section 212 provides authority to review and modify the permit at any time. Any inaccuracies found in the submitted information may be grounds for the termination, modification, revocation, and reissuance of this permit (see LAC 33:V.323) and potential enforcement action. The Permittee must inform the LDEQ of any deviation from or changes in the information in the application that would affect the Permittee's ability to comply with the applicable regulations or permit conditions.

This permit shall be effective as of _____, and shall remain in effect until_____, unless revoked, reissued, modified or terminated in accordance with LAC 33:V.323 and 705 of the Louisiana Hazardous Waste Regulations. The Administrative Authority may issue any permit for a duration that is less than the maximum term of ten (10) years and the term shall not be extended beyond the maximum duration by modification in accordance with LAC 33:V.315.

Post-closure requirements of LAC 33:V. Chapter 35, Subchapter B must continue for at least thirty (30) years after the date of closure for the land disposal units listed in Tables IV-D and IV-E of this permit. Expiration of this permit does not relieve the Permittee of the responsibility to reapply for a permit for the remainder of the thirty (30) year post-closure care period.

Provisions of this permit may be appealed in writing pursuant to La. R.S. 30:2024(A) within thirty (30) days from receipt of the permit. Only those provisions specifically appealed will be suspended by a request for hearing, unless the Secretary elects to suspend other provisions as well. A request for hearing must be sent to the following:

Louisiana Department of Environmental Quality
Office of the Secretary
Attention: Hearings Clerk, Legal Services Division
Post Office Box 4302
Baton Rouge, Louisiana 70821-4302

DRAFT

_____ _____

Cheryl Sonnier Nolan, Assistant Secretary Date
Louisiana Department of Environmental Quality

PUBLIC PARTICIPATION

PUBLIC NOTICE
LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY (LDEQ)
THE DOW CHEMICAL COMPANY/ LOUISIANA OPERATIONS
PUBLIC HEARING AND REQUEST FOR PUBLIC COMMENT ON THE DRAFT HAZARDOUS WASTE OPERATING RENEWAL PERMIT

The LDEQ, Office of Environmental Services, will conduct a public hearing to receive comments on the draft hazardous waste operating renewal permit for The Dow Chemical Company (Dow), Lousiana Operations, P.O. Box 150, Plaquemine, Louisiana 70765 for the Plaquemine Facility. **The facility is located at 21255 LA Highway 405, Plaquemine, Iberville Parish.**

The hearing will be held on Monday, September 8, 2008, beginning at 6:00 p.m., at the Iberville Parish Council Meeting Room on the 2nd Floor, Courthouse Building, located at 58050 Meriam Street Plaquemine, LA 70765. During the hearing, all interested persons will have an opportunity to comment on the draft permit.

Dow requested to renew its hazardous waste operating permit governing the operation of: thirteen (13) hazardous waste tanks; five (5) container storage areas; six (6) hazardous waste thermal treatment units; one (1) operational hazardous waste land disposal unit; and one (1) post-closure hazardous waste land disposal unit/corrective action management unit at its Plaquemine Facility. Dow's Plaquemine facility generates hazardous wastes incidental to its chemical manufacturing operations. After generation, all of Dow's hazardous wastes are stored onsite before ultimate onsite or offsite treatment or disposal. Under the proposed draft hazardous waste operating renewal permit, the receipt, storage, treatment, and/or disposal of offsite generated hazardous wastes is prohibitted.

Dow's Plaquemine Facility manufactures both organic and inorganic compounds such as: sodium hydroxide, chlorine, ethylene, propylene, polyethylene, vinyl chloride monomer (VCM), benzene, ethylene oxide, propylene oxide, glycol, glycol ethers, substituted cellulose, and various chlorinated hydrocarbon products. Dow's multiple chemical production processes generate various hazardous wastes incidental to process operations. Dow's thirteen (13) hazardous waste tanks are utilized for the storage of numerous onsite generated hazardous wastes. Most generated liquid hazardous waste streams are treated onsite in Dow's six (6) RCRA permitted thermal treatment units. Ash and residues generated by the combusiton of hazardous wastes in the thermal treatment units are classified as hazardous waste. Ash and residues removed from the thermal treatment units are disposed of in the permitted Block 80 hazarodus waste landfill.

The proposed draft hazardous waste operating renewal permit also includes permit conditions governing Dow's groundwater protection and monitoring programs for two (2) permitted land disposal units: the active Block 80 hazardous waste landfill and the closed Northwest Landfill/Corrective Action Management Unit (NWLF/CAMU). The NWLF/CAMU is currently permitted under a hazardous waste CAMU permit (LAD008187080-CAMU-1). If, after the end of the public comment period, LDEQ renders a decision to issue the hazarous waste operating renewal permit, the CAMU permit will be terminated. Specific information regarding all hazardous waste permitted units, required plans, and site conditions can be found in the: hazardous waste operating permit renewal application; the reponses to the notices of deficiencies, and the draft hazardous waste operating renewal permit.

Written comments or written requests for notification of the final permit decision regarding this permit may also be submitted to Ms. Soumaya Ghosn at LDEQ, Public Participation Group, P.O. Box 4313, Baton Rouge, LA

70821-4313. **Written comments and/or written requests for notification must be received by 12:30 p.m., Wednesday, September 10, 2008.** Written comments will be considered prior to a final permit decision.

LDEQ will send notification of the final permit decision to the applicant and to each person who has submitted written comments or a written request for notification of the final decision.

The permit renewal application, reponses to the notices of deficiencies, and draft hazardous waste operating renewal permit are available for review at the LDEQ, Public Records Center, Room 127, 602 North 5th Street, Baton Rouge, LA. Viewing hours are from 8:00 a.m. to 4:30 p.m., Monday through Friday (except holidays). **The available information can also be accessed electronically on the Electronic Document Management System (EDMS) on the DEQ public website at www.deq.louisiana.gov**.

Additional copies may be reviewed at the Iberville Parish Library, Parish Hcadquaters Library, 24605 J. Gerald Berret Blvd., Plaquemine, Louisiana 70764-0736 and the West Baton Rouge Parish Library, 830 North Alexander, Port Allen, Louisiana 70767-2327.

Previous notices have been published in the The Advocate, The West Side Journal and in the Plaquemine Post South on January 13, 2000

Individuals with a disability, who need an accommodation in order to participate in the public hearing, should contact Ms. Dina Heidar at the above address or by phone at (225) 219-3278.

Inquiries or requests for additional information regarding this permit action should be directed to Mr. Craig Easley, LDEQ, Waste Permits Division, P.O. Box 4313, Baton Rouge, LA 70821-4313, phone (225) 219-3050.

Persons wishing to be included on the LDEQ permit public notice mailing list or for other public participation related questions should contact the Public Participation Group in writing at LDEQ, P.O. Box 4313, Baton Rouge, LA 70821-4313, by email at deqmaillistrequest@la.gov or contact the LDEQ Customer Service Center at (225) 219-LDEQ (219-5337).

Permit public notices including electronic access to the draft permit and associated information can be viewed at the LDEQ permits public notice webpage at www.deq.louisiana.gov/apps/pubNotice/default.asp and general information related to the public participation in permitting activities can be viewed at www.deq.louisiana.gov/portal/tabid/2198/Default.aspx

Alternatively, individuals may elect to receive the permit public notices via email by subscribing to the LDEQ permits public notice List Server at www.doa.louisiana.gov/oes/listservpage/ldeq_pn_listserv.htm

All correspondence should specify AI Number 1409, Permit Number LAD008187080-OP-1-RN-1, and Activity Number PER19980003.

Scheduled Publication Date: Thursday, July 24, 2008

LDEQ
RADIO ANNOUNCEMENT
DRAFT HAZARDOUS WASTE PERMIT

The LDEQ, Office of Environmental Services, will conduct a public hearing to receive comments on the draft hazardous waste permit and the associated environmental assessment statement for **The Dow Chemical Company/ Louisiana Operations**, P.O. Box 150, Plaquemine, Louisiana 70765 for the Plaquemine Facility. **The facility is located at 21255 LA Highway 405, Plaquemine, Iberville Parish.**

The hearing will be held on Monday, September 8, 2008, beginning at 6:00 p.m., at the Iberville Parish Council Meeting Room on the 2nd Floor, Courthouse Building, located at 58050 Meriam Street Plaquemine, LA 70765.. During the hearing, all interested persons will have an opportunity to comment on the draft hazardous waste post-closure permit and the associated environmental assessment statement.

The public comment period will end on Wednesday, September 10, 2008 at 12:30 p.m.

A copy of the draft hazardous waste post-closure permit and related documents are available for review at the the Iberville Parish Library, Parish Headquaters Library, 24605 J. Gerald Berret Blvd., Plaquemine, Louisiana 70764-0736 and the West Baton Rouge Parish Library, 830 North Alexander, Port Allen, Louisiana 70767-2327 and the Louisiana Department of Environmental Quality Public Records Center in Baton Rouge, LA.

The detailed public notice is scheduled for publication in The Advocate, The West Side Journal and The Plaquemine Post South on July 24, 2008.

For any inquiries contact LDEQ Customer Service Center at (225) 219-LDEQ, that is (225) 219-5337.

BOBBY JINDAL
GOVERNOR

HAROLD LEGGETT, PH.D.
SECRETARY

State of Louisiana

DEPARTMENT OF ENVIRONMENTAL QUALITY
ENVIRONMENTAL SERVICES

July 16, 2008

Phone#: (225) 343-2540
Fax #: (225) 344-0923

Ms. Deanie Rumfola
Legal Advertising
West Side Journal
P.O. Box 260
Port Allen, LA 70767

Re: **REQUEST FOR PUBLIC COMMENTS ON A DRAFT HAZARDOUS WASTE OPERATING RENEWAL PERMIT THE DOW CHEMICAL COMPANY/ LOUISIANA OPERATIONS AI NUMBER 1409, PERMIT NUMBER LAD008187080-OP-1-RN-1, AND ACTIVITY NUMBER PER19980003 PLAQUEMINE, IBERVILLE PARISH, LOUISIANA**

Dear Ms. Rumfola :

Please publish the attached legal notice regarding the above referenced facility as a regular legal ad in the WEST SIDE JOURNAL *once only* on **Thursday, July 24, 2008.** You will also receive a copy of the legal notice itself via email at: deanie@thewestsidejournal.com

Immediately after publication, please fax a copy of the ad to Ms. Dina Heidar at (225) 325-8149.

State regulations require that we provide notification to the public and allow sufficient time for public comments. For this department to be assured that adequate notification is provided, we are requesting that you sign and date the enclosed 'Verification by Newspaper', and fax it to the attention of Ms. Dina Heidar (225) 325-8149 immediately upon publication. If the notice cannot be published on the date requested, please contact Ms. Dina Heidar (225) 219-3278 or email: dina.heidar@la.gov

The invoice for this public notice should be sent to:

Ms. Lisa Perry
EH&S
Dow Chemical Company
P.O. Box
Plaquemine, LA 70765-0150

Company Contact: Lisa Perry
Telephone: (225) 353-4316

Company Contact: Christine Baldridge
Telephone: (225) 353-6252

The official proof of publication in the form of a **tear sheet** should be mailed to the attention of Ms. Dina Heidar, LDEQ, Environmental Assistance Division, P.O. Box 4313, Baton Rouge, LA 70821-4313.

Thank you for assisting in our effort to serve the public.

Sincerely,
Dina Heidar
Environmental Scientist, Public Participation Group

DH/Attachments/2

BOBBY JINDAL
GOVERNOR

HAROLD LEGGETT, PH.D.
SECRETARY

State of Louisiana

DEPARTMENT OF ENVIRONMENTAL QUALITY
ENVIRONMENTAL SERVICES

JUL 2 1 2008

Ms. Lisa Perry
EH&S
The Dow Chemical Company, Louisiana Operations
P.O. Box 150
Plaquemine, LA 70765-0150

RE: Draft Hazardous Waste Operating Renewal Permit
The Dow Chemical Company (Dow) – Plaquemine Facility
AI#1409 / LAD 008 187 080 / PER19980003

Dear Ms. Perry:

Attached is Dow's copy of the draft hazardous waste operating renewal permit for Dow's Plaquemine Facility, LAD008187080-OP-RN-1, which contains language pertaining to the operation of hazardous waste storage tanks, container storage areas, thermal treatment units, and the Block 80 Hazardous Waste Landfill. The draft hazardous waste operating renewal permit also contains language governing the post-closure care of the Northwest Landfill/Corrective Action Management Unit (NWLF/CAMU). The NWLF/CAMU is currently permitted under an effective CAMU permit (Permit Number LAD008187080-CAMU-1). If, after the end of the public comment period, the Administrative Authority renders a decision to issue the hazardous waste operating renewal permit, the CAMU permit will be terminated.

A comment period of forty-five (45) days will be allowed in order for the public to review and comment on this draft renewal hazardous waste operating renewal permit. A public hearing will also be scheduled at least forty-five (45) days after the date on which the public notice is given. Specific dates for the beginning and ending of the comment period are contained in the attached public notice.

Prior to taking a final action on the draft hazardous waste operating renewal permit, the Administrative Authority will consider all significant comments submitted on this action. Written comments must be submitted no later than 12:30 p.m. on the final day of the comment period. The issuance of the final permit decision will be in accordance with LAC 33:V.705.

Please reference your Agency Interest Number (1409), EPA ID Number (LAD008187080), and Permit Activity Number 19980003 on all future correspondence pertaining to this matter. If you have any questions, please contact Mr. Craig Easley of the Waste Services Section at (225) 219-3050 or Ms. Soumaya Ghosn of the Public Participation Group at (225) 219-3276.

Sincerely,

Bijan Sharafkhani, P.E.
Administrator
Waste Permits Division

kce

Attachment

c: Kishor Fruitwala – EPA Region 6

BOBBY JINDAL
GOVERNOR

HAROLD LEGGETT, PH.D.
SECRETARY

State of Louisiana

DEPARTMENT OF ENVIRONMENTAL QUALITY
ENVIRONMENTAL SERVICES

July 16, 2008

Phone: (225) 383-1111
Fax: (225) 388-0164

Ms. Susan Bush
Legal Advertising
The Advocate
P.O. Box 588
Baton Rouge, LA 70821-0588

Re: **REQUEST FOR PUBLIC COMMENTS ON A DRAFT HAZARDOUS WASTE OPERATING RENEWAL PERMIT**
THE DOW CHEMICAL COMPANY/ LOUISIANA OPERATIONS
AI NUMBER 1409, PERMIT NUMBER LAD008187080-OP-1-RN-1, AND ACTIVITY NUMBER PER19980003
PLAQUEMINE, IBERVILLE PARISH, LOUISIANA

Dear Ms. Bush:

Please publish the attached legal notice regarding the above referenced facility as a regular legal ad in the ADVOCATE *once only* on **Thursday, July 24, 2008.** You will also receive a copy of the legal notice itself via email at: legal.ads@theadvocate.com

Immediately after publication, please fax a copy of the ad to Ms. Dina Heidar at (225) 325-8149.

State regulations require that we provide notification to the public and allow sufficient time for public comments. For this department to be assured that adequate notification is provided, we are requesting that you sign and date the enclosed 'Verification by Newspaper', and fax it to the attention of Ms. Dina Heidar (225) 325-8149 immediately upon publication. If the notice cannot be published on the date requested, please contact Ms. Dina Heidar (225) 219-3278 or email: dina.heidar@la.gov

The invoice for this public notice should be sent to:

Ms. Lisa Perry
EH&S
Dow Chemical Company
P.O. Box
Plaquemine, LA 70765-0150

Company Contact: Lisa Perry
Telephone: (225) 353-4316

Company Contact: Christine Baldridge
Telephone: (225) 353-6252

The official proof of publication in the form of a **tear sheet** should be mailed to the attention of Ms. Dina Heidar, LDEQ, Environmental Assistance Division, P.O. Box 4313, Baton Rouge, LA 70821-4313.

Thank you for assisting in our effort to serve the public.

Sincerely,
Dina Heidar
Environmental Scientist, Public Participation Group

DH/Attachments/2

BOBBY JINDAL
GOVERNOR

HAROLD LEGGETT, PH.D.
SECRETARY

State of Louisiana

DEPARTMENT OF ENVIRONMENTAL QUALITY
ENVIRONMENTAL SERVICES

July 16, 2008

Phone: (225) 687-3288
Fax: (225) 687-1814

Ms. Liz Troxclair
Legal Advertising
Plaquemine Post/South
P.O. Box 589
Plaquemine, LA 70765-0589

Re: **REQUEST FOR PUBLIC COMMENTS ON A DRAFT HAZARDOUS WASTE OPERATING RENEWAL PERMIT THE DOW CHEMICAL COMPANY/ LOUISIANA OPERATIONS AI NUMBER 1409, PERMIT NUMBER LAD008187080-OP-1-RN-1, AND ACTIVITY NUMBER PER19980003 PLAQUEMINE, IBERVILLE PARISH, LOUISIANA**

Dear Ms. Troxclair:

Please publish the attached legal notice regarding the above referenced facility as a regular legal ad in the PLAQUEMINE POST SOUTH *once only* on **Thursday, July 24, 2008.** You will also receive a copy of the legal notice itself via email at: pscirculation@postsouth.com

Immediately after publication, please fax a copy of the ad to Ms. Dina Heidar at (225) 325-8149.

State regulations require that we provide notification to the public and allow sufficient time for public comments. For this department to be assured that adequate notification is provided, we are requesting that you sign and date the enclosed 'Verification by Newspaper', and fax it to the attention of Ms. Dina Heidar (225) 325-8149 immediately upon publication. If the notice cannot be published on the date requested, please contact Ms. Dina Heidar (225) 219-3278 or email: dina.heidar@la.gov

The invoice for this public notice should be sent to:

Ms. Lisa Perry
EH&S
Dow Chemical Company
P.O. Box
Plaquemine, LA 70765-0150

Company Contact: Lisa Perry
Telephone: (225) 353-4316

Company Contact: Christine Baldridge
Telephone: (225) 353-6252

The official proof of publication in the form of a **tear sheet** should be mailed to the attention of Ms. Dina Heidar, LDEQ, Environmental Assistance Division, P.O. Box 4313, Baton Rouge, LA 70821-4313.

Thank you for assisting in our effort to serve the public.

Sincerely,
Dina Heidar
Environmental Scientist, Public Participation Group

DH/Attachments/2

BOBBY JINDAL
GOVERNOR

HAROLD LEGGETT, PH.D.
SECRETARY

State of Louisiana

DEPARTMENT OF ENVIRONMENTAL QUALITY
ENVIRONMENTAL SERVICES

July 21, 2008

Via Fax 225-231-1879
Phone 225-408-0231, Cell 225-335-0216

Mr. Michael Norwood
WJBO-AM
PO Box 14061
Baton Rouge, LA 70898-4061

Re: **PUBLIC HEARING AND REQUEST FOR PUBLIC COMMENTS ON A DRAFT HAZARDOUS WASTE OPERATING RENEWAL PERMIT**
THE DOW CHEMICAL COMPANY/ LOUISIANA OPERATIONS
AI NUMBER 1409, PERMIT NUMBER LAD008187080-OP-1-RN-1, AND ACTIVITY NUMBER PER19980003
PLAQUEMINE, IBERVILLE PARISH, LOUISIANA

Dear Mr. Norwood:

Please broadcast the enclosed public announcement regarding the above referenced facility *once only*, **on Thursday, July 24, 2008.**

We are requesting that as soon as the announcement has been made, please sign and date the '**Verification By Radio Station**' and mail or fax to the attention of Ms. Dina Heidar at the following address:

Ms. Dina Heidar
Environmental Scientist
Office of Environmental Services
Environmental Assistance Division
Post Office Box 4313
Baton Rouge, Louisiana 70821-4313
Fax: (225) 325-8149
Email at dina.heidar@la.gov

The charges for this service should be billed to:

Ms. Lisa Perry
EH&S
Dow Chemical Company
P.O. Box
Plaquemine, LA 70765-0150
Company Contact 1: Lisa Perry
Telephone: (225) 353-4316
Company Contact 2: Christine Baldridge
Telephone: (225) 353-6252

Thank you for assisting in our effort to serve the public.

Sincerely,
Dina Heidar
Environmental Scientist, Public Participation Group

DH/ Attachments/2

BOBBY JINDAL
GOVERNOR

HAROLD LEGGETT, PH.D.
SECRETARY

State of Louisiana

DEPARTMENT OF ENVIRONMENTAL QUALITY
ENVIRONMENTAL SERVICES

July 21, 2008

Tel: (214) 665-6750

Mr. Kishor Fruitwala, Ph.D., P.E.
U. S. EPA, Region VI
1445 Ross Avenue
Dallas, Texas 75202-2733

Re: **PUBLIC HEARING AND REQUEST FOR PUBLIC COMMENTS ON A DRAFT HAZARDOUS WASTE OPERATING RENEWAL PERMIT**
THE DOW CHEMICAL COMPANY/ LOUISIANA OPERATIONS
AI NUMBER 1409, PERMIT NUMBER LAD008187080-OP-1-RN-1, AND ACTIVITY NUMBER PER19980003
PLAQUEMINE, IBERVILLE PARISH, LOUISIANA

Dear Mr. Fruitwala:

The Louisiana Department of Environmental Quality (LDEQ) is enclosing for your reference, a copy of the draft hazardous waste permit and the legal notice for the public notice for public comments to be published in THE ADVOCATE, WEST SIDE JOURNAL and THE PLAQUEMINE POST SOUTH on Thursday, July 24,2008. There will also be radio announcement on the WJBO –AM in Baton Rouge. It is also posted on the LDEQ Website, found at www.deq.state.la.us. Written comments on the proposed air permits may be submitted to Ms. Soumaya Ghosn, LDEQ-OES, Environmental Assistance Division, P.O. Box 4313, Baton Rouge, LA 70821-4313. All comments regarding the technically complete permit renewal application should specify Agency Interest (AI) No. 1409

Should you have any questions additional permit information may be obtained from Craig Easley, LDEQ, Permits Division, P.O. Box 4313, Baton Rouge, LA 70821-4313, telephone (225) 219-3050. Should you have any questions regarding the draft hazardous waste permit, please contact Ms. Dina Heidar, LDEQ, Environmental Assistance Division, Stakeholder Outreach Section, at (225) 219-3278.

Please complete the attached 'Verification of Receipt' and mail to Ms. Dina Heidar, LDEQ-OES, Environmental Assistance Division, PO Box 4313, Baton Rouge, LA 70821-4313, or Fax (225) 325-8149.

We appreciate your assistance in our efforts to serve the public. If you have any questions, please call Ms. Heidar at (225) 219-3278.

Sincerely,

Dina Heidar
Environmental Scientist, Public Participation Group

DH

Attachments/3

BOBBY JINDAL
GOVERNOR

HAROLD LEGGETT, PH.D.
SECRETARY

State of Louisiana

DEPARTMENT OF ENVIRONMENTAL QUALITY
ENVIRONMENTAL SERVICES

July 24, 2008

Phone : 225-342-7920
Fax 225-342-7918

Beth Vandersteen, Director
West Baton Rouge Parish Library,
830 North Alexander,
Port Allen, LA 70767-2327

Re: **PUBLIC HEARING AND REQUEST FOR PUBLIC COMMENTS ON A DRAFT HAZARDOUS WASTE OPERATING RENEWAL PERMIT**
THE DOW CHEMICAL COMPANY/ LOUISIANA OPERATIONS
AI NUMBER 1409, PERMIT NUMBER LAD008187080-OP-1-RN-1, AND ACTIVITY NUMBER PER19980003
PLAQUEMINE, IBERVILLE PARISH, LOUISIANA

Dear Ms.Vandersteen:

We request that the enclosed proposed a draft hazardous waste operating renewal permit and all subsequent submittals of additional information and public notice associated with the referenced facility be made available for public review upon receipt in the **West Baton Rouge Parish Library, 830 North Alexander, Port Allen, Louisiana 70767-2327.** It is imperative that these documents are available for review at all times; therefore, they cannot be checked out by anyone at any time.

The documents should be retained during the permitting process. At the close of the permitting period, the Louisiana Department of Environmental Quality, Office of Environmental Services (LDEQ-OES), Permits Division, will provide written notice to you requesting that the information be removed.

Please complete the attached 'Verification by Library' and mail to Ms. Dina Heidar, LDEQ-OES, Environmental Assistance Division, Post Office Box 4313, Baton Rouge, Louisiana 70821-4313, or Fax to (225) 325-8149

We appreciate your assistance in our efforts to serve the public. If you have any questions, please call Ms. Heidar at (225) 219-3278.

Sincerely,

Dina Heidar
Environmental Scientist, Public Participation Group

DH

Attachments/2

BOBBY JINDAL
GOVERNOR

HAROLD LEGGETT, PH.D.
SECRETARY

State of Louisiana

DEPARTMENT OF ENVIRONMENTAL QUALITY
ENVIRONMENTAL SERVICES

July 24, 2008

Phone : 225-687-2520
Fax: : 225-687-9719

Dan J. Ball, Director
Iberville Parish Library,
24605 J. Gerald Berret Blvd.,
Plaquemine, LA 70764-0736

Re: **PUBLIC HEARING AND REQUEST FOR PUBLIC COMMENTS ON A DRAFT HAZARDOUS WASTE OPERATING RENEWAL PERMIT**
THE DOW CHEMICAL COMPANY/ LOUISIANA OPERATIONS
AI NUMBER 1409, PERMIT NUMBER LAD008187080-OP-1-RN-1, AND ACTIVITY NUMBER PER19980003
PLAQUEMINE, IBERVILLE PARISH, LOUISIANA

Dear Mr. Ball:

We request that the enclosed proposed a draft hazardous waste operating renewal permit and all subsequent submittals of additional information and public notice associated with the referenced facility be made available for public review upon receipt in the **Iberville Parish Library, Parish Headquaters Library, 24605 J. Gerald Berret Blvd., Plaquemine, Louisiana 70764-0736.** It is imperative that these documents are available for review at all times; therefore, they cannot be checked out by anyone at any time.

The documents should be retained during the permitting process. At the close of the permitting period, the Louisiana Department of Environmental Quality, Office of Environmental Services (LDEQ-OES), Permits Division, will provide written notice to you requesting that the information be removed.

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We appreciate your assistance in our efforts to serve the public. If you have any questions, please call Ms. Heidar at (225) 219-3278.

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DH

Attachments/3

BOBBY JINDAL
GOVERNOR

HAROLD LEGGETT, PH.D.
SECRETARY

State of Louisiana

DEPARTMENT OF ENVIRONMENTAL QUALITY
ENVIRONMENTAL SERVICES

July 21, 2008

Phone: (225) 687-3257
Fax : (225) 687-5277

Mr. J. Mitchell Ourso, Jr, Parish President
Iberville Parish Council
58050 Meriam Street
P.O. Box 389
Plaquemine, LA 70765-0389

Re: **PUBLIC HEARING AND REQUEST FOR PUBLIC COMMENTS ON A DRAFT HAZARDOUS WASTE OPERATING RENEWAL PERMIT**
THE DOW CHEMICAL COMPANY/ LOUISIANA OPERATIONS
AI NUMBER 1409, PERMIT NUMBER LAD008187080-OP-1-RN-1, AND ACTIVITY NUMBER PER19980003
PLAQUEMINE, IBERVILLE PARISH, LOUISIANA

Dear Mr. Ourso:

The Louisiana Department of Environmental Quality (LDEQ) is requesting public comments regarding permitting actions for the referenced company/facility. Detailed information regarding the date, time and location of the public hearing is available in the attached public notice.

For your reference, attached is a copy of the draft hazardous waste permit and the legal notice is to be published in THE ADVOCATE and THE ADVOCATE, WEST SIDE JOURNAL and THE PLAQUEMINE POST SOUTH on Thursday, July 24,2008. There will also be radio announcement on the WJBO – AM in Baton Rouge. It is also posted on the LDEQ Website, found at www.deq.state.la.us. Written comments on the proposed air permits may be submitted to Ms. Soumaya Ghosn, LDEQ-OES, Environmental Assistance Division, P.O. Box 4313, Baton Rouge, LA 70821-4313. All comments regarding the technically complete permit renewal application should specify Agency Interest (AI) No. 1409

Should you have any questions additional permit information may be obtained from Craig Easley, LDEQ, Permits Division, P.O. Box 4313, Baton Rouge, LA 70821-4313, telephone (225) 219-3050. Should you have any questions regarding the draft hazardous waste permit, please contact Ms. Dina Heidar, LDEQ, Environmental Assistance Division, Stakeholder Outreach Section, at (225) 219-3278.

Please complete the attached 'Verification of Receipt' and mail to Ms. Dina Heidar, LDEQ-OES, Environmental Assistance Division, PO Box 4313, Baton Rouge, LA 70821-4313, or Fax (225) 325-8149.

We appreciate your assistance in our efforts to serve the public. If you have any questions, please call Ms. Heidar at (225) 219-3278.

Sincerely,

Dina Heidar
Environmental Scientist, Public Participation Group

DH/
Attachments/3

BOBBY JINDAL
GOVERNOR

HAROLD LEGGETT, PH.D.
SECRETARY

State of Louisiana

DEPARTMENT OF ENVIRONMENTAL QUALITY
ENVIRONMENTAL SERVICES

July 21, 2008

Phone: 225-383-4755
Fax : 225-387-0218

Mr. Riley L. Berthelot, Jr. Parish President
West Baton Rouge Parish Council
880 N. Alexander Ave.
Port Allen LA 70767

Re: **PUBLIC HEARING AND REQUEST FOR PUBLIC COMMENTS ON A DRAFT HAZARDOUS WASTE OPERATING RENEWAL PERMIT**
THE DOW CHEMICAL COMPANY/ LOUISIANA OPERATIONS
AI NUMBER 1409, PERMIT NUMBER LAD008187080-OP-1-RN-1, AND ACTIVITY NUMBER PER19980003
PLAQUEMINE, IBERVILLE PARISH, LOUISIANA

Dear Mr. Berthelot:

The Louisiana Department of Environmental Quality (LDEQ) is requesting public comments regarding permitting actions for the referenced company/facility. Detailed information regarding the date, time and location of the public hearing is available in the attached public notice.

For your reference, attached is a copy of the draft hazardous waste permit and the legal notice is to be published in THE ADVOCATE and THE ADVOCATE, WEST SIDE JOURNAL and THE PLAQUEMINE POST SOUTH on Thursday, July 24,2008. There will also be radio announcement on the WJBO – AM in Baton Rouge. It is also posted on the LDEQ Website, found at www.deq.state.la.us. Written comments on the proposed air permits may be submitted to Ms. Soumaya Ghosn, LDEQ-OES, Environmental Assistance Division, P.O. Box 4313, Baton Rouge, LA 70821-4313. All comments regarding the technically complete permit renewal application should specify Agency Interest (AI) No. 1409

Should you have any questions additional permit information may be obtained from Craig Easley, LDEQ, Permits Division, P.O. Box 4313, Baton Rouge, LA 70821-4313, telephone (225) 219-3050. Should you have any questions regarding the draft hazardous waste permit, please contact Ms. Dina Heidar, LDEQ, Environmental Assistance Division, Stakeholder Outreach Section, at (225) 219-3278.

Please complete the attached 'Verification of Receipt' and mail to Ms. Dina Heidar, LDEQ-OES, Environmental Assistance Division, PO Box 4313, Baton Rouge, LA 70821-4313, or Fax (225) 325-8149.

We appreciate your assistance in our efforts to serve the public. If you have any questions, please call Ms. Heidar at (225) 219-3278.

Sincerely,

Dina Heidar
Environmental Scientist, Public Participation Group

DH/
Attachments/3

BOBBY JINDAL
GOVERNOR

HAROLD LEGGETT, PH.D.
SECRETARY

State of Louisiana

DEPARTMENT OF ENVIRONMENTAL QUALITY
ENVIRONMENTAL SERVICES

July 21, 2008

Phone: (225) 219-3600
Fax : (225) 219-3695

Bobby Mayweather
Capital Regional Office
PO. Box 4312
Baton Rouge, LA 70821-4312

Re: PUBLIC HEARING AND REQUEST FOR PUBLIC COMMENTS ON A DRAFT HAZARDOUS WASTE OPERATING RENEWAL PERMIT
THE DOW CHEMICAL COMPANY/ LOUISIANA OPERATIONS
AI NUMBER 1409, PERMIT NUMBER LAD008187080-OP-1-RN-1, AND ACTIVITY NUMBER PER19980003
PLAQUEMINE, IBERVILLE PARISH, LOUISIANA

Dear Mr. Mayweather:

We are enclosing a copy of the draft hazardous waste permit and public notice for the referenced facility for your use and for public review.

Please complete the attached 'Verification of Receipt' and mail to Ms. Dina Heidar, LDEQ-OES, Environmental Assistance Division, PO Box 4313, Baton Rouge, LA 70821-4313, or Fax (225) 325-8149.

We appreciate your assistance in our efforts to serve the public. If you have any questions, please call Ms. Heidar at (225) 219-3278.

Sincerely,

Dina Heidar
Environmental Scientist, Public Participation Group

DH

Attachments/3

PART A APPLICATION

Please print or type with ELITE type (12 characters per inch) in the unshaded areas only

Form Approved. OMB No. 2050-0034 Expires 10/31/99
GSA No. 0248-EPA-OT

EPA I.D. Number (Enter from page 1)	Secondary ID Number (Enter from page 1)
LAD008187080	

VII. Operator Information (See Instructions)

Name of Operator			
THE DOW CHEMICAL COMPANY			
Street or P.O. Box			
PO BOX 150			
City or Town	**State**	**ZIP Code**	
PLAQUEMINE	LA	70765-0150	
Phone Number (Area Code and Number)	**B. Operator Type**	**C. Change of Operator Indicator**	**Date Changed (Month Day Year)**
225-353-6128	P	Yes [ ] No [X]	

VIII. Facility Owner (See Instructions)

A. Name of Facility's Legal Owner			
THE DOW CHEMICAL COMPANY			
Street or P.O. Box			
ABBOTT ROAD			
City or Town	**State**	**ZIP Code**	
MIDLAND	MI	48674-	
Phone Number (Area Code and Number)	**B. Owner Type**	**C. Change of Owner Indicator**	**Date Changed (Month Day Year)**
517-638-8800	P	Yes [ ] No [X]	

IX. SIC Codes (4-digit, in order of significance)

Primary		Secondary	
2812	(Description) CHLORINE/CAUSTIC	2869	(Description) HYDROCARBONS
Secondary		**Secondary**	
2821	(Description) POLYETHYLENE	2869	(Description) CHLORINATED HYDROCARBONS

X. Other Environmental Permits (See Instructions)

A. Permit Type (Enter code)	B. Permit Number	C. Description

Form Approved. OMB No. 2050-0034 Expires 10/31/99
GSA No. 0248-EPA-OT

Please print or type with ELITE type (12 characters per inch) in the unshaded areas only

EPA I.D. Number *(Enter from page 1)*: LAD008187080

Secondary ID Number *(Enter from page 1)*:

XI. Nature of Business *(Provide a brief description)*

INTEGRATED PRODUCTION OF CHLORINE, SODIUM HYDROXIDE, ELECTRIC POWER, ETHYLENE, PROPYLENE, CHLORINATED PARAFINS, POLYETHYLENE, CHLORINATED POLYETHYLENE, ETHANOLAMINES, BENZENE, VINYL CHLORIDE, SUBSTITUTED CELLULOSE, ETHYLENE OXIDE, PROPYLENE OXIDE, GLYCOLS, GLYCOL ETHERS, STYRENIC BLOCK COPOLYMERS.

XII. Process Codes and Design Capacities

A. **PROCESS CODE** - *Enter the code from the list of process codes below that best describes each process to be used at the facility. Thirteen lines are provided for entering codes. If more lines are needed, attach a separate sheet of paper with the additional information. For "other" processes (i.e., D99, S99, T04 and X99), describe the process (including its design capacity) in the space provided in Item XIII.*

B. **PROCESS DESIGN CAPACITY** - *For each code entered in column A, enter the capacity of the process.*
1. **AMOUNT** - *Enter the amount. In a case where design capacity is not applicable (such as in a closure/post-closure or enforcement action) enter the total amount of waste for that process.*
2. **UNIT OF MEASURE** - *For each amount entered in column B(1), enter the code from the list of unit measure codes below that describes the unit of measure used. Only the units of measure that are listed below should be used.*

C. **PROCESS TOTAL NUMBER OF UNITS** - *Enter the total number of units used with the corresponding process code.*

PROCESS CODE	PROCESS	APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY
	Disposal:	
D79	Underground Injection	Gallons; Liters; Gallons Per Day; or Liters Per Day
D80	Landfill	Acre-feet or Hectare-meter
D81	Land Treatment	Acres or Hectares
D82	Ocean Disposal	Gallons Per Day or Liters Per Day
D83	Surface Impoundment	Gallons or Liters
D99	Other Storage	Any Unit of Measure Listed Below
	Storage:	
S01	Container (Barrel, Drum, Etc.)	Gallons or Liters
S02	Tank	Gallons or Liters
S03	Waste Pile	Cubic Yards or Cubic Meters
S04	Surface Impoundment	Gallons or Liters
S05	Drip Pad	Gallons or Liters
S06	Containment Building	Cubic Yards or Cubic Meters
S99	Other Disposal	Any Unit of Measure Listed Below
	Treatment:	
T01	Tank	Gallons Per Day or Liters Per Day
T02	Surface Impoundment	Gallons Per Day or Liters Per Day
T03	Incinerator	Short Tons Per Hour; Metric Tons Per Hour; Gallons Per Hour; Liters Per Hour; or Btu's Per Hour
T04	Other Treatment	Gallons Per Day; Liters Per Day; Pounds Per Hour; Short Tons Per Hour; Kilograms Per Hour; Metric Tons Per Day; Metric Tons Per Hour; Short Tons Per Day; or Btu's Per Hour
T80	Boiler	Gallons or Liters
T81	Cement Kiln	Gallons Per Day; Liters Per Day; Pounds Per Hour; Short Tons Per Hour; Kilograms Per Hour; Metric Tons Per Day; Metric Tons Per Hour; Short Tons Per Day; or Btu's Per Hour
T82	Lime Kiln	
T83	Aggregate Kiln	
T84	Phosphate Kiln	
T85	Coke Oven	
T86	Blast Furnace	
T87	Smelting, Melting, Or Refining Furnace	Gallons Per Day; Liters Per Day; Pounds Per Hour; Short Tons Per Hour; Kilograms Per Hour; Metric Tons Per Day; Metric Tons Per Hour; Short Tons Per Day; or Btu's Per Hour
T88	Titanium Dioxide Chloride Process Oxidation Reactor	
T89	Methane Reforming Furnace	
T90	Pulping Liquor Recovery Furnace	
T91	Combustion Device Used In The Recovery Of Sulfur Values From Spent Sulfuric Acid	
T92	Halogen Acid Furnaces	
T93	Other Industrial Furnaces Listed in 40 CFR §260.10	
T94	Containment Building	Cubic Yards or Cubic Meters
	Miscellaneous (Subpart X):	
X01	Open Burning/Open Detonation	Any Unit of Measure Listed Below
X02	Mechanical Processing	Short Tons Per Hour; Metric Tons Per Hour; Short Tons Per Day; Metric Tons Per Day; Pounds Per Hour; or Kilograms Per Hour
X03	Thermal Unit	Gallons Per Day; Liters Per Day; Pounds Per Hour; Short Tons Per Hour; Kilograms Per Hour; Metric Tons Per Day; Metric Tons Per Hour; Short Tons Per Day; or Btu's Per Hour
X04	Geologic Repository	Cubic Yards or Cubic Meters
X99	Other Subpart X	Any Unit of Measure Listed Below

UNIT OF MEASURE	UNIT OF MEASURE CODE
Gallons	G
Gallons Per Hour	E
Gallons Per Day	U
Liters	L
Liters Per Hour	H
Liters Per Day	V

UNIT OF MEASURE	UNIT OF MEASURE CODE
Short Tons Per Hour	D
Metric Tons Per Hour	W
Short Tons Per Day	N
Metric Tons Per Day	S
Pounds Per Hour	J
Kilograms Per Hour	R

UNIT OF MEASURE	UNIT OF MEASURE CODE
Cubic Yards	Y
Cubic Meters	C
Acres	B
Acre-feet	A
Hectares	Q
Hectare-meter	F
Btu's Per Hour	I

Please print or type with ELITE type (12 characters per inch) in the unshaded areas only

Form Approved. OMB No. 2050-0034 Expires 10/31/99
GSA No. 0248-EPA-OT

EPA I.D. Number (Enter from page 1): L A D 0 0 8 1 8 7 0 8 0

Secondary ID Number (Enter from page 1):

XII. Process Codes and Design Capabilities (Continued)

EXAMPLE FOR COMPLETING ITEM XII (shown in line number X-1 below): A facility has a storage tank, which can hold 533,788 gallons.

Line Number	A. Process Code (From list above)	B. PROCESS DESIGN CAPACITY 1. Amount (Specify)	B. 2. Unit Of Measure (Enter code)	C. Process Total Number Of Units	For Official Use Only
X 1	S 0 2	5 3 3 7 8 8	G	0 0 1	
1	S 0 1	2 2 2 , 0 0 0 *	G	0 0 5	
2	S 0 2	1 8 4 , 5 8 9	G	0 1 4	
3	T 0 3	1 0 6 , 0 0 0 , 0 0 0	I	0 0 2	
4	D 8 0	1 6 8 , 2 7 8	Y	0 0 2	
5	T 8 0	1 5 0 , 0 0 0 . 0 0 0	I	0 0 4	
6					
7		*capacity for wastes containing free liquids			
8					
9					
10					
11					
12					
13					

NOTE: If you need to list more than 13 process codes, attach an additional sheet(s) with the information in the same format as above. Number the lines sequentially, taking into account any lines that will be used for "other" processes (i.e., D99, S99, T04 and X99) in Item XIII.

XIII. Other Processes (Follow instructions from Item XII for D99, S99, T04 and X99 process codes)

Line Number (Enter #s in seq w/XII)	A. Process Code (From list above)	B. PROCESS DESIGN CAPACITY 1. Amount (Specify)	B. 2. Unit Of Measure (Enter code)	C. Process Total Number Of Units	D. Description Of Process
X 1	T 0 4				In-situ Vitrification
1					
2					
3					
4					

Form Approved, OMB No. 2050-0034 Expires 10/31/99
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EPA I.D. Number *(Enter from page 1)*: L A D 0 0 8 1 8 7 0 8 0

Secondary ID Number *(Enter from page 1)*:

XIV. Description of Hazardous Wastes

A. EPA HAZARDOUS WASTE NUMBER - *Enter the four-digit number from 40 CFR, Part 261 Subpart D of each listed hazardous waste you will handle. For hazardous wastes which are not listed in 40 CFR, Part 261 Subpart D, enter the four-digit number(s) from 40 CFR, Part 261 Subpart C that describes the characteristics and/or the toxic contaminants of those hazardous wastes.*

B. ESTIMATED ANNUAL QUANTITY - *For each listed waste entered in column A estimate the quantity of that waste that will be handled on an annual basis. For each characteristic or toxic contaminant entered in column A estimate the total annual quantity of all the non-listed waste(s) that will be handled which possess that characteristic or contaminant.*

C. UNIT OF MEASURE - *For each quantity entered in column B enter the unit of measure code. Units of measure which must be used and the appropriate codes are:*

ENGLISH UNIT OF MEASURE	CODE	METRIC UNIT OF MEASURE	CODE
POUNDS	P	KILOGRAMS	K
TONS	T	METRIC TONS	M

If facility records use any other unit of measure for quantity, the units of measure must be converted into one of the required units of measure taking into account the appropriate density or specific gravity of the waste.

D. PROCESSES

1. PROCESS CODES:

For listed hazardous waste: For each listed hazardous waste entered in column A select the code(s) from the list of process codes contained in Item XII A. on page 3 to indicate how the waste will be stored, treated, and/or disposed of at the facility.

For non-listed hazardous waste: For each characteristic or toxic contaminant entered in column A, select the code(s) from the list of process codes contained in Item XII A. on page 3 to indicate all the processes that will be used to store, treat, and/ or dispose of all the non-listed hazardous wastes that possess that characteristic or toxic contaminant.

NOTE: THREE SPACES ARE PROVIDED FOR ENTERING PROCESS CODES. IF MORE ARE NEEDED:

1. *Enter the first two as described above.*
2. *Enter "000" in the extreme right box of Item XIV-D(1).*
3. *Enter in the space provided on page 7, Item XIV-E, the line number and the additional code(s).*

2. PROCESS DESCRIPTION: *If a code is not listed for a process that will be used, describe the process in the space provided on the form (D.(2)).*

NOTE: HAZARDOUS WASTES DESCRIBED BY MORE THAN ONE EPA HAZARDOUS WASTE NUMBER - Hazardous wastes that can be described by more than one EPA Hazardous Waste Number shall be described on the form as follows:

1. *Select one of the EPA Hazardous Waste Numbers and enter it in column A. On the same line complete columns B, C and D by estimating the total annual quantity of the waste and describing all the processes to be used to treat, store, and/or dispose of the waste.*
2. *In column A of the next line enter the other EPA Hazardous Waste Number that can be used to describe the waste. In column D(2) on that line enter "included with above" and make no other entries on that line.*
3. *Repeat step 2 for each EPA Hazardous Waste Number that can be used to describe the hazardous waste.*

EXAMPLE FOR COMPLETING ITEM XIV (shown in line numbers X-1, X-2, X-3, and X-4 below) - A facility will treat and dispose of an estimated 900 pounds per year of chrome shavings from leather tanning and finishing operation. In addition, the facility will treat and dispose of three non-listed wastes. Two wastes are corrosive only and there will be an estimated 200 pounds per year of each waste. The other waste is corrosive and ignitable and there will be an estimated 100 pounds per year of that waste. Treatment will be in an incinerator and disposal will be in a landfill.

Line Number	A. EPA HAZARD WASTE NO. (Enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (Enter code)	D. PROCESS (1) PROCESS CODES (Enter)	D. PROCESS (2) PROCESS DESCRIPTION (If a code is not entered in D(1))
X 1	K 0 5 4	900	P	T 0 3 D 8 0	
X 2	D 0 0 2	400	P	T 0 3 D 8 0	
X 3	D 0 0 1	100	P	T 0 3 D 8 0	
X 4	D 0 0 2				Included With Above

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GSA No. 0248-EPA-OT

Please print or type with ELITE type (12 characters per inch) in the unshaded areas only

EPA I.D. Number *(Enter from page 1)*: L A D 0 0 8 1 8 7 0 8 0

Secondary ID Number *(Enter from page 1)*:

XIV. Description of Hazardous Wastes *(Continued)*

Line Number	A. EPA Hazardous Waste No. (Enter code)	B. Estimated Annual Quantity of Waste	C. Unit of Measure (Enter code)	D. PROCESSES (1) PROCESS CODES (Enter code)	D. PROCESSES (2) PROCESS DESCRIPTION (If a code is not entered in D(1))
1	S E E	TABLE	2	S E E T A	BLE 2
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
31					
32					
33					

Please print or type with ELITE type (12 characters per inch) in the unshaded areas only

Form Approved, OMB No. 2050-0034 Expires 10/31/99
GSA No. 0248-EPA-OT

EPA I.D. Number (Enter from page 1)	Secondary ID Number (Enter from page 1)
A D 0 0 8 1 8 7 0 8 0	

XV. Map

Attach to this application a topographic map, or other equivalent map, of the area extending to at least one mile beyond property boundaries. The map must show the outline of the facility, the location of each of its existing and proposed intake and discharge structures, each of its hazardous waste treatment, storage, or disposal facilities, and each well where it injects fluids underground. Include all springs, rivers and other surface water bodies in this map area. See instructions for precise requirements.

XVI. Facility Drawing

All existing facilities must include a scale drawing of the facility (See instructions for more detail).

XVII. Photographs

All existing facilities must include photographs (aerial or ground-level) that clearly delineate all existing structures; existing storage, treatment and disposal areas; and sites of future storage, treatment or disposal areas (see instructions for more detail).

XVIII. Certification(s)

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Owner Signature	Date Signed 12/9/04
Name and Official Title (Type or print) LEE TRUSTY, VICE PRESIDENT & GENERAL MANAGER, LOUISIANA OPERATIONS	
Owner Signature	Date Signed
Name and Official Title (Type or print)	
Operator Signature	Date Signed
Name and Official Title (Type or print)	
Operator Signature	Date Signed
Name and Official Title (Type or print)	

XIX. Comments

Note: Mail completed form to the appropriate EPA Regional or State Office. (Refer to instructions for more information)

Attachment A - Part A Application Form

Current Permit	Permit Number	Permit Date Issued
Air Permits		
LHC II	2255	4/8/1994
VINYL II GROUNDWATER REMEDIATION	2301	3/3/1995
SOLVENTS GROUNDWATER TANK	2328	7/5/1995
TANK CAR/TANK TRUCK CLEANING	2235	5/6/1996
CMP	2037 (M-4)	9/6/1996
CPE	2200-V0	10/10/1999
CMP (Small Source Permit)	2702	1/26/2001
GLYCOL II	2203 (M-1)	2/5/2001
CMP THROX	1902 (M-2)	2/23/2001
POLY A	2008-V1	3/2/2001
GLYCOL 1	2007-V1	5/9/2001
VINYL II TTU	2285-V1	12/21/2001
POLY C	2048-V0	3/1/2002
POWER & UTILITIES Fuel Switching	2267-V1	5/8/2002
GLYCOL 1 THROX Initial Title V	2794-V0	5/24/2002
CHLOR ALKALI III	2759-V0	8/27/2002
LHC III Major Modification	2024-V2	10/29/2002
Environmental Operations	2190 (M-1)	12/2/2002
Polyethylene B Minor Modification	2179-V3	1/17/2003
VECTOR SBC Minor Modification	2025-V1	5/14/2003
Chlorine/Cell Service Minor Modification	2573-V3	8/22/2003
Cellulose Minor Modification	2227-V3	1/13/2004
Solvents/EDC I Title V	2188-V0	1/30/2004
VINYL II Minor Modification	2665-V6	4/2/2004
Solid Waste Permits		
Block 80 Non-Hazardous Landfill	P-0069	Sep-89
Facility RCRA permit	LAD008187080	19-May-89
Water		
Division NPDES	LA0003301	12-Oct-04
Hydrostatic Test Waters	LAG679014	19-Feb-03
Multisector General Stormwater	LAR05N128	24-Oct-01
Stormwater for Construction Activities	LAR10C623	7-Sep-04

Table 2 of Part A Application

Line Number	A. EPA Hazardous Waste No. (Enter code)	B. Estimated Annual Quantity of Waste	C. Unit of Measure (Enter code)	D. Processes			
				(1) Process Codes (Enter code)			(2) Process Description (If a code is not entered in D(1))
1	D001	4,277	T	S01	S02	T03	T80, D80
2	D002	12,817	T	S01	S02	T03	T80, D80
3	D003	144.0	T	S01	S02	T03	T80, D80
4	D004	<1	T	S01	S02	T03	T80, D80
5	D005	<1	T	S01	S02	T03	T80, D80
6	D006	<1	T	S01	S02	T03	T80, D80
7	D007	<1	T	S01	S02	T03	T80, D80
8	D008	<1	T	S01	S02	T03	T80, D80
9	D009	<1	T	S01	S02	T03	T80, D80
10	D010	<1	T	S01	S02	T03	T80, D80
11	D011	<1	T	S01	S02	T03	T80, D80
12	D012	<1	T	S01	S02	T03	T80, D80
13	D013	<1	T	S01	S02	T03	T80, D80
14	D014	<1	T	S01	S02	T03	T80, D80
15	D015	<1	T	S01	S02	T03	T80, D80
16	D016	<1	T	S01	S02	T03	T80, D80
17	D017	<1	T	S01	S02	T03	T80, D80
18	D018	29.0	T	S01	S02	T03	T80, D80
19	D019	93.0	T	S01	S02	T03	T80, D80
20	D020	<1	T	S01	S02	T03	T80, D80
21	D021	2.0	T	S01	S02	T03	T80, D80
22	D022	37.0	T	S01	S02	T03	T80, D80
23	D023	<1	T	S01	S02	T03	T80, D80
24	D024	<1	T	S01	S02	T03	T80, D80
25	D025	<1	T	S01	S02	T03	T80, D80
26	D026	<1	T	S01	S02	T03	T80, D80
27	D027	23	T	S01	S02	T03	T80, D80
28	D028	139.0	T	S01	S02	T03	T80, D80
29	D029	4.0	T	S01	S02	T03	T80, D80
30	D030	<1	T	S01	S02	T03	T80, D80
31	D031	<1	T	S01	S02	T03	T80, D80
32	D032	41.0	T	S01	S02	T03	T80, D80
33	D033	48.0	T	S01	S02	T03	T80, D80

Table 2 of part A Application (Cont.)

Line Number	A. EPA Hazardous Waste No. (Enter code)	B. Estimated Annual Quantity of Waste	C. Unit of Measure (Enter code)	D. Processes			
				(1) Process Codes (Enter code)			(2) Process Description (If a code is not entered in D(1))
34	D034	47.0	T	S01	S02	T03	T80, D80
35	D035	5.0	T	S01	S02	T03	T80, D80
36	D036	<1	T	S01	S02	T03	T80, D80
37	D037	<1	T	S01	S02	T03	T80, D80
38	D038	<1	T	S01	S02	T03	T80, D80
39	D039	32.0	T	S01	S02	T03	T80, D80
40	D040	128.0	T	S01	S02	T03	T80, D80
41	D041	<1	T	S01	S02	T03	T80, D80
42	D042	<1	T	S01	S02	T03	T80, D80
43	D043	<1	T	S01	S02	T03	T80, D80
44	F001	512.0	T	S01	S02	T03	T80, D80
45	F002	349.0	T	S01	S02	T03	T80, D80
46	F003	31.0	T	S01	S02	T03	T80, D80
47	F004	<1	T	S01	S02	T03	T80, D80
48	F005	110.0	T	S01	S02	T03	T80, D80
49	F024	3,271	T	S01	S02	T03	T80, D80
50	F025	<1	T	S01	S02	T03	T80, D80
51	F039	2	T	S01	S02	T03	T80, D80
52	K016	1,033	T	S01	S02	T03	T80, D80
53	K017	<1	T	S01	S02	T03	T80, D80
54	K018	<1	T	S01	S02	T03	T80, D80
55	K019	3,832	T	S01	S02	T03	T80, D80
56	K020	4,030	T	S01	S02	T03	T80, D80
57	K022	<1	T	S01	S02	T03	T80, D80
58	K027	<1	T	S01	S02	T03	T80, D80
59	K028	5.4	T	S01	S02	T03	T80, D80
60	K029	<1	T	S01	S02	T03	T80, D80
61	K030	1,418	T	S01	S02	T03	T80, D80
62	K073	615.0	T	S01	S02	T03	T80, D80
63	K095	<1	T	S01	S02	T03	T80, D80
64	K096	<1	T	S01	S02	T03	T80, D80
65	K116	<1	T	S01	S02	T03	T80, D80
66	K174	<1	T	S01	S02	T03	T80, D80

Table 2 of Part A Application (Cont.)

Line Number	A. EPA Hazardous Waste No. (Enter code)	B. Estimated Annual Quantity of Waste	C. Unit of Measure (Enter code)	D. Processes			
				(1) Process Codes (Enter code)			(2) Process Description (If a code is not entered in D(1))
67	P001	<1	T	S01	S02	T03	T80, D80
68	P002	<1	T	S01	S02	T03	T80, D80
69	P003	<1	T	S01	S02	T03	T80, D80
70	P005	<1	T	S01	S02	T03	T80, D80
71	P006	<1	T	S01	S02	T03	T80, D80
72	P007	<1	T	S01	S02	T03	T80, D80
73	P008	<1	T	S01	S02	T03	T80, D80
74	P009	<1	T	S01	S02	T03	T80, D80
75	P014	<1	T	S01	S02	T03	T80, D80
76	P016	<1	T	S01	S02	T03	T80, D80
77	P017	<1	T	S01	S02	T03	T80, D80
78	P018	<1	T	S01	S02	T03	T80, D80
79	P021	<1	T	S01	S02	T03	T80, D80
80	P022	<1	T	S01	S02	T03	T80, D80
81	P023	<1	T	S01	S02	T03	T80, D80
82	P026	<1	T	S01	S02	T03	T80, D80
83	P027	<1	T	S01	S02	T03	T80, D80
84	P028	<1	T	S01	S02	T03	T80, D80
85	P030	<1	T	S01	S02	T03	T80, D80
86	P031	<1	T	S01	S02	T03	T80, D80
87	P033	<1	T	S01	S02	T03	T80, D80
88	P034	<1	T	S01	S02	T03	T80, D80
89	P040	<1	T	S01	S02	T03	T80, D80
90	P041	<1	T	S01	S02	T03	T80, D80
91	P042	<1	T	S01	S02	T03	T80, D80
92	P043	<1	T	S01	S02	T03	T80, D80
93	P044	<1	T	S01	S02	T03	T80, D80
94	P045	<1	T	S01	S02	T03	T80, D80
95	P046	<1	T	S01	S02	T03	T80, D80
96	P047	<1	T	S01	S02	T03	T80, D80
97	P048	<1	T	S01	S02	T03	T80, D80
98	P049	<1	T	S01	S02	T03	T80, D80
99	P054	<1	T	S01	S02	T03	T80, D80

Table 2 of Part A Application (Cont.)

Line Number	A. EPA Hazardous Waste No. (Enter code)	B. Estimated Annual Quantity of Waste[1]	C. Unit of Measure (Enter code)	D. Processes			
				(1) Process Codes (Enter code)			(2) Process Description (If a code is not entered in D(1))
100	P057	<1	T	S01	S02	T03	T80, D80
101	P058	<1	T	S01	S02	T03	T80, D80
102	P062	<1	T	S01	S02	T03	T80, D80
103	P063	<1	T	S01	S02	T03	T80, D80
104	P064	<1	T	S01	S02	T03	T80, D80
105	P066	<1	T	S01	S02	T03	T80, D80
106	P067	<1	T	S01	S02	T03	T80, D80
107	P068	<1	T	S01	S02	T03	T80, D80
108	P069	<1	T	S01	S02	T03	T80, D80
109	P070	<1	T	S01	S02	T03	T80, D80
110	P072	<1	T	S01	S02	T03	T80, D80
111	P075	<1	T	S01	S02	T03	T80, D80
112	P081	<1	T	S01	S02	T03	T80, D80
113	P084	<1	T	S01	S02	T03	T80, D80
114	P085	<1	T	S01	S02	T03	T80, D80
115	P087	<1	T	S01	S02	T03	T80, D80
116	P088	<1	T	S01	S02	T03	T80, D80
117	P093	<1	T	S01	S02	T03	T80, D80
118	P095	<1	T	S01	S02	T03	T80, D80
119	P096	<1	T	S01	S02	T03	T80, D80
120	P098	<1	T	S01	S02	T03	T80, D80
121	P102	<1	T	S01	S02	T03	T80, D80
122	P105	<1	T	S01	S02	T03	T80, D80
123	P106	<1	T	S01	S02	T03	T80, D80
124	P108	<1	T	S01	S02	T03	T80, D80
125	P109	<1	T	S01	S02	T03	T80, D80
126	P111	<1	T	S01	S02	T03	T80, D80
127	P112	<1	T	S01	S02	T03	T80, D80
128	P116	<1	T	S01	S02	T03	T80, D80
129	P118	<1	T	S01	S02	T03	T80, D80
130	P121	<1	T	S01	S02	T03	T80, D80
131	P122	<1	T	S01	S02	T03	T80, D80
132	U001	<1	T	S01	S02	T03	T80, D80

Table 2 of Part A Application (Cont.)

Line Number	A. EPA Hazardous Waste No. (Enter code)	B. Estimated Annual Quantity of Waste	C. Unit of Measure (Enter code)	D. Processes (1) Process Codes (Enter code)			D. Processes (2) Process Description (If a code is not entered in D(1))
133	U002	<1	T	S01	S02	T03	T80, D80
134	U003	<1	T	S01	S02	T03	T80, D80
135	U004	<1	T	S01	S02	T03	T80, D80
136	U005	<1	T	S01	S02	T03	T80, D80
137	U006	<1	T	S01	S02	T03	T80, D80
138	U007	<1	T	S01	S02	T03	T80, D80
139	U008	<1	T	S01	S02	T03	T80, D80
140	U009	<1	T	S01	S02	T03	T80, D80
141	U010	<1	T	S01	S02	T03	T80, D80
142	U011	<1	T	S01	S02	T03	T80, D80
143	U012	<1	T	S01	S02	T03	T80, D80
144	U014	<1	T	S01	S02	T03	T80, D80
145	U015	<1	T	S01	S02	T03	T80, D80
146	U016	<1	T	S01	S02	T03	T80, D80
147	U017	<1	T	S01	S02	T03	T80, D80
148	U018	<1	T	S01	S02	T03	T80, D80
149	U019	<1	T	S01	S02	T03	T80, D80
150	U020	<1	T	S01	S02	T03	T80, D80
151	U021	<1	T	S01	S02	T03	T80, D80
152	U022	<1	T	S01	S02	T03	T80, D80
153	U023	<1	T	S01	S02	T03	T80, D80
154	U025	<1	T	S01	S02	T03	T80, D80
155	U026	<1	T	S01	S02	T03	T80, D80
156	U027	<1	T	S01	S02	T03	T80, D80
157	U028	<1	T	S01	S02	T03	T80, D80
158	U029	<1	T	S01	S02	T03	T80, D80
159	U031	<1	T	S01	S02	T03	T80, D80
160	U033	<1	T	S01	S02	T03	T80, D80
161	U034	<1	T	S01	S02	T03	T80, D80
162	U035	<1	T	S01	S02	T03	T80, D80
163	U037	<1	T	S01	S02	T03	T80, D80
164	U038	<1	T	S01	S02	T03	T80, D80
165	U039	<1	T	S01	S02	T03	T80, D80

Table 2 of Part A Application (Cont.)

Line Number	A. EPA Hazardous Waste No. (Enter code)	B. Estimated Annual Quantity of Waste	C. Unit of Measure (Enter code)	D. Processes			
				(1) Process Codes (Enter code)			(2) Process Description (If a code is not entered in D(1))
166	U041	<1	T	S01	S02	T03	T80, D80
167	U042	<1	T	S01	S02	T03	T80, D80
168	U043	<1	T	S01	S02	T03	T80, D80
169	U044	172	T	S01	S02	T03	T80, D80
170	U045	25.0	T	S01	S02	T03	T80, D80
171	U046	<1	T	S01	S02	T03	T80, D80
172	U047	<1	T	S01	S02	T03	T80, D80
173	U048	<1	T	S01	S02	T03	T80, D80
174	U049	<1	T	S01	S02	T03	T80, D80
175	U050	<1	T	S01	S02	T03	T80, D80
176	U051	<1	T	S01	S02	T03	T80, D80
177	U052	<1	T	S01	S02	T03	T80, D80
178	U053	<1	T	S01	S02	T03	T80, D80
179	U055	<1	T	S01	S02	T03	T80, D80
180	U056	6	T	S01	S02	T03	T80, D80
181	U057	<1	T	S01	S02	T03	T80, D80
182	U058	<1	T	S01	S02	T03	T80, D80
183	U059	<1	T	S01	S02	T03	T80, D80
184	U062	<1	T	S01	S02	T03	T80, D80
185	U063	<1	T	S01	S02	T03	T80, D80
186	U064	<1	T	S01	S02	T03	T80, D80
187	U066	<1	T	S01	S02	T03	T80, D80
188	U067	1,188	T	S01	S02	T03	T80, D80
189	U068	<1	T	S01	S02	T03	T80, D80
190	U069	<1	T	S01	S02	T03	T80, D80
191	U070	<1	T	S01	S02	T03	T80, D80
192	U071	<1	T	S01	S02	T03	T80, D80
193	U072	<1	T	S01	S02	T03	T80, D80
194	U073	<1	T	S01	S02	T03	T80, D80
195	U074	<1	T	S01	S02	T03	T80, D80
196	U075	<1	T	S01	S02	T03	T80, D80
197	U076	<1	T	S01	S02	T03	T80, D80
198	U077	281	T	S01	S02	T03	T80, D80

Table 2 of Part A Application (Cont.)

Line Number	A. EPA Hazardous Waste No. (Enter code)	B. Estimated Annual Quantity of Waste	C. Unit of Measure (Enter code)	D. Processes			
				(1) Process Codes (Enter code)			(2) Process Description (If a code is not entered in D(1))
199	U078	<1	T	S01	S02	T03	T80, D80
200	U079	<1	T	S01	S02	T03	T80, D80
201	U080	<1	T	S01	S02	T03	T80, D80
202	U081	<1	T	S01	S02	T03	T80, D80
203	U082	<1	T	S01	S02	T03	T80, D80
204	U083	25.0	T	S01	S02	T03	T80, D80
205	U084	8.9	T	S01	S02	T03	T80, D80
206	U085	<1	T	S01	S02	T03	T80, D80
207	U086	<1	T	S01	S02	T03	T80, D80
208	U087	<1	T	S01	S02	T03	T80, D80
209	U088	<1	T	S01	S02	T03	T80, D80
210	U089	<1	T	S01	S02	T03	T80, D80
211	U090	<1	T	S01	S02	T03	T80, D80
212	U091	<1	T	S01	S02	T03	T80, D80
213	U092	<1	T	S01	S02	T03	T80, D80
214	U093	<1	T	S01	S02	T03	T80, D80
215	U094	<1	T	S01	S02	T03	T80, D80
216	U095	<1	T	S01	S02	T03	T80, D80
217	U096	<1	T	S01	S02	T03	T80, D80
218	U097	<1	T	S01	S02	T03	T80, D80
219	U098	<1	T	S01	S02	T03	T80, D80
220	U099	<1	T	S01	S02	T03	T80, D80
221	U101	<1	T	S01	S02	T03	T80, D80
222	U102	<1	T	S01	S02	T03	T80, D80
223	U103	<1	T	S01	S02	T03	T80, D80
224	U105	<1	T	S01	S02	T03	T80, D80
225	U107	<1	T	S01	S02	T03	T80, D80
226	U108	<1	T	S01	S02	T03	T80, D80
227	U109	<1	T	S01	S02	T03	T80, D80
228	U110	<1	T	S01	S02	T03	T80, D80
229	U112	<1	T	S01	S02	T03	T80, D80
230	U113	<1	T	S01	S02	T03	T80, D80
231	U114	<1	T	S01	S02	T03	T80, D80

Table 2 of Part A Application (Cont.)

Line Number	EPA Hazardous Waste No. (Enter code)	B. Estimated Annual Quantity of Waste[1]	C. Unit of Measure (Enter code)	D. Processes			
				(1) Process Codes (Enter code)			(2) Process Description (If a code is not entered in D[1])
232	U115	<1	T	S01	S02	T03	T80, D80
233	U116	<1	T	S01	S02	T03	T80, D80
234	U117	<1	T	S01	S02	T03	T80, D80
235	U118	<1	T	S01	S02	T03	T80, D80
236	U119	<1	T	S01	S02	T03	T80, D80
237	U120	<1	T	S01	S02	T03	T80, D80
238	U121	<1	T	S01	S02	T03	T80, D80
239	U122	<1	T	S01	S02	T03	T80, D80
240	U123	<1	T	S01	S02	T03	T80, D80
241	U124	<1	T	S01	S02	T03	T80, D80
242	U125	<1	T	S01	S02	T03	T80, D80
243	U126	<1	T	S01	S02	T03	T80, D80
244	U127	<1	T	S01	S02	T03	T80, D80
245	U128	<1	T	S01	S02	T03	T80, D80
246	U130	<1	T	S01	S02	T03	T80, D80
247	U131	<1	T	S01	S02	T03	T80, D80
248	U132	<1	T	S01	S02	T03	T80, D80
249	U133	<1	T	S01	S02	T03	T80, D80
250	U135	<1	T	S01	S02	T03	T80, D80
251	U137	<1	T	S01	S02	T03	T80, D80
252	U140	<1	T	S01	S02	T03	T80, D80
253	U141	<1	T	S01	S02	T03	T80, D80
254	U143	<1	T	S01	S02	T03	T80, D80
255	U144	<1	T	S01	S02	T03	T80, D80
256	U147	<1	T	S01	S02	T03	T80, D80
257	U148	<1	T	S01	S02	T03	T80, D80
258	U149	<1	T	S01	S02	T03	T80, D80
259	U150	<1	T	S01	S02	T03	T80, D80
260	U153	<1	T	S01	S02	T03	T80, D80
261	U154	<1	T	S01	S02	T03	T80, D80
262	U156	<1	T	S01	S02	T03	T80, D80
263	U157	<1	T	S01	S02	T03	T80, D80
264	U158	<1	T	S01	S02	T03	T80, D80

Table 2 of Part A Application (Cont.)

Line Number	A. EPA Hazardous Waste No. (Enter code)	B. Estimated Annual Quantity of Waste[1]	C. Unit of Measure (Enter code)	D. Processes			
				(1) Process Codes (Enter code)			(2) Process Description (If a code is not entered in D(1))
265	U159	<1	T	S01	S02	T03	T80, D80
266	U160	<1	T	S01	S02	T03	T80, D80
267	U161	<1	T	S01	S02	T03	T80, D80
268	U162	<1	T	S01	S02	T03	T80, D80
269	U163	<1	T	S01	S02	T03	T80, D80
270	U164	<1	T	S01	S02	T03	T80, D80
271	U165	<1	T	S01	S02	T03	T80, D80
272	U166	<1	T	S01	S02	T03	T80, D80
273	U167	<1	T	S01	S02	T03	T80, D80
274	U168	<1	T	S01	S02	T03	T80, D80
275	U169	<1	T	S01	S02	T03	T80, D80
276	U170	<1	T	S01	S02	T03	T80, D80
277	U171	<1	T	S01	S02	T03	T80, D80
278	U172	<1	T	S01	S02	T03	T80, D80
279	U173	<1	T	S01	S02	T03	T80, D80
280	U176	<1	T	S01	S02	T03	T80, D80
281	U177	<1	T	S01	S02	T03	T80, D80
282	U178	<1	T	S01	S02	T03	T80, D80
283	U179	<1	T	S01	S02	T03	T80, D80
284	U180	<1	T	S01	S02	T03	T80, D80
285	U181	<1	T	S01	S02	T03	T80, D80
286	U182	<1	T	S01	S02	T03	T80, D80
287	U183	<1	T	S01	S02	T03	T80, D80
288	U184	<1	T	S01	S02	T03	T80, D80
289	U185	<1	T	S01	S02	T03	T80, D80
290	U186	<1	T	S01	S02	T03	T80, D80
291	U187	<1	T	S01	S02	T03	T80, D80
292	U188	<1	T	S01	S02	T03	T80, D80
293	U189	<1	T	S01	S02	T03	T80, D80
294	U190	<1	T	S01	S02	T03	T80, D80
295	U191	55.8	T	S01	S02	T03	T80, D80
296	U192	<1	T	S01	S02	T03	T80, D80
297	U193	<1	T	S01	S02	T03	T80, D80

Table 2 of Part A Application (Cont.)

Line Number	A. EPA Hazardous Waste No. (Enter code)	B. Estimated Annual Quantity of Waste	C. Unit of Measure (Enter code)	D. Processes			
				(1) Process Codes (Enter code)			(2) Process Description (If a code is not entered in D(1))
298	U194	<1	T	S01	S02	T03	T80, D80
299	U196	<1	T	S01	S02	T03	T80, D80
300	U197	<1	T	S01	S02	T03	T80, D80
301	U200	<1	T	S01	S02	T03	T80, D80
302	U201	<1	T	S01	S02	T03	T80, D80
303	U202	<1	T	S01	S02	T03	T80, D80
304	U206	<1	T	S01	S02	T03	T80, D80
305	U207	<1	T	S01	S02	T03	T80, D80
306	U208	<1	T	S01	S02	T03	T80, D80
307	U209	<1	T	S01	S02	T03	T80, D80
308	U210	<1	T	S01	S02	T03	T80, D80
309	U211	17.5	T	S01	S02	T03	T80, D80
310	U213	<1	T	S01	S02	T03	T80, D80
311	U218	<1	T	S01	S02	T03	T80, D80
312	U219	<1	T	S01	S02	T03	T80, D80
313	U220	22.0	T	S01	S02	T03	T80, D80
314	U221	<1	T	S01	S02	T03	T80, D80
315	U222	<1	T	S01	S02	T03	T80, D80
316	U223	<1	T	S01	S02	T03	T80, D80
317	U225	<1	T	S01	S02	T03	T80, D80
318	U226	1.8	T	S01	S02	T03	T80, D80
319	U227	2.8	T	S01	S02	T03	T80, D80
320	U228	<1	T	S01	S02	T03	T80, D80
321	U234	<1	T	S01	S02	T03	T80, D80
322	U236	<1	T	S01	S02	T03	T80, D80
323	U237	<1	T	S01	S02	T03	T80, D80
324	U238	<1	T	S01	S02	T03	T80, D80
325	U239	<1	T	S01	S02	T03	T80, D80
326	U240	<1	T	S01	S02	T03	T80, D80
327	U243	<1	T	S01	S02	T03	T80, D80
328	U244	<1	T	S01	S02	T03	T80, D80
329	U246	<1	T	S01	S02	T03	T80, D80
330	U247	<1	T	S01	S02	T03	T80, D80

Table 2 of Part A Application (Cont.)

Line Number	A. EPA Hazardous Waste No. (Enter code)	B. Estimated Annual Quantity of Waste[1]	C. Unit of Measure (Enter code)	D. Processes			
				(1) Process Codes (Enter code)			(2) Process Description (If a code is not entered in D(1))
331	U248	<1	T	S01	S02	T03	T80, D80
332	U249	<1	T	S01	S02	T03	T80, D80
333	U328	<1	T	S01	S02	T03	T80, D80
334	U353	<1	T	S01	S02	T03	T80, D80
335	U359	<1	T	S01	S02	T03	T80, D80

[1] Estimated annual waste quantities are from 1997 (baseline year).

TABLE OF CONTENTS

TABLE OF CONTENTS

TABLE OF CONTENTS

LIST OF ATTACHMENTS

BODY OF PERMIT

DRAFT
HAZARDOUS WASTE OPERATING RENEWAL PERMIT

The Dow Chemical Company – Louisiana Operations
EPA ID# LAD008187080
Agency Interest# 1409

Iberville Parish
Plaquemine, Louisiana
PER19980003
Permit Number LAD008187080-OP-1-RN-1

I. PERMIT PREAMBLE

This permit is issued to The Dow Chemical Company, hereinafter referred to as the Permittee, by the Louisiana Department of Environmental Quality (LDEQ) under authority of the Louisiana Hazardous Waste Control Law, R.S. 30:2171 et seq., and the regulations adopted thereunder.

For the purposes of the permit, "Administrative Authority" shall mean the Secretary of the Department of Environmental Quality, or his/her designee.

This permit is based on information submitted in the permit application, and all subsequent amendments, and on the applicant's certification that such information is accurate and that all facilities were or will be maintained and operated as specified in the application.

This permit is conditioned upon full compliance with all applicable provisions of the Louisiana Hazardous Waste Control Law, R.S. 30:2171 et. Seq., and the regulations adopted thereunder.

GLOSSARY OF TERMS

For the purpose of this Permit, terms used herein shall have the same meaning as those in LAC 33:V.Subpart 1 unless the context of use in this Permit clearly indicates otherwise. Where terms are not otherwise defined, the meaning otherwise associated with such terms shall be as defined by a standard dictionary reference or the generally accepted scientific or industrial meaning of the term.

"Administrative Authority" means the Secretary of the Department of Environmental Quality or his designee or the appropriate assistant secretary or his designee.

"Application" refers to the RCRA Part B Permit Application and subsequent amendments submitted by the Permittee for obtaining a Permit.

"Area of Concern" (AOC) means any discernable unit or area, which, in the opinion of the Administrative Authority, may have received solid or hazardous waste or waste containing hazardous constituents at any time. The Administrative Authority may require investigation of the unit to determine if it is a Solid Waste Management Unit (SWMU). If shown to be a SWMU by the investigation, the AOC must be reported by the Permittee as a newly identified SWMU. If the AOC is shown not to be a SWMU by the investigation, the Administrative Authority may determine that no further action is necessary and notify the Permittee in writing.

"Area of Investigation" (AOI) is a zone contiguous to and including impacted media defined vertically and horizontally by the presence of one or more constituents in concentrations exceeding the limiting SS, MO-1 RS, or MO-2 RS (depending on the option being implemented).

"Beneficial Resource" describes a natural resource that is useful to human and ecological receptors. The state may establish statutes or regulations that identify certain environmental components, such as specific ground water or surface water sources, as a "Special Beneficial Resource," or "Designated Beneficial Resource." The beneficial resource then may be entitled to greater protection from contamination.

"Constituents of Concern" (COC) means the COPCs that pose a significant risk.

"Constituents of Potential Concern" (COPC) means chemicals from hazardous waste and hazardous waste constituents that are potentially site related and have data of quality for use in the Screen or a site-specific risk assessment. The facility should compile a list of COPCs for each release site based on existing sampling data, waste analysis reports, etc.

"Conceptual Site Model" (CSM) is part of the Data Quality Objective (DQO) process that presents a three-dimensional picture of site conditions at a discrete point in time that conveys what is known about the facility, releases, release mechanisms, contaminant fate and transport,

exposure pathways, potential receptors, and risks. The information for the CSM is documented into six profiles. The CSM evolves as data gaps in the profiles become more complete, and will be refined based upon results of site characterization data. The final CSM is documented in the Risk Management Plan (RMP).

"CWA" means Clean Water Act.

"Corrective Action" is an activity conducted to protect human health and the environment.

"Department" means the Louisiana Department of Environmental Quality.

"Dense Nonaqueous Phase Liquid (DNAPL)" a dense liquid not dissolved in water, commonly referred to as "free product."

"EPA" means the United States Environmental Protection Agency.

"Facility" means, for the purpose of conducting corrective action under LAC 33:V.3322, all the contiguous property under the control of the Permittee.

"HSWA" means the 1984 Hazardous and Solid Waste Amendments to RCRA.

"Hazardous Constituent" means any constituent identified in LAC 33:V.Chapter 31, Table 1, or any constituent identified in LAC 33:V.3325, Table 4.

"LDEQ" means the Louisiana Department of Environmental Quality.

"Light Nonaqueous Phase Liquid (LNAPL)" a light liquid not dissolved in water, commonly referred to as "free product."

"Newly-discovered Release" any release(s) of hazardous waste, including hazardous constituents, in which there is a statistically significant in crease over the background data for the media of concern, during the course of groundwater monitoring, field investigation, environmental auditing, or by other means.

"Operating Record" means written or electronic records of all maintenance, monitoring, inspection, calibration, or performance testing—or other data as may be required—to demonstrate compliance with this Permit, document noncompliance with this Permit, or document actions taken to remedy noncompliance with this Permit. The minimum list of documents that must be included in the operating record is identified at LAC 33:V.1529.B.

"Permittee" means The Dow Chemical Company, 21255 LA Hwy 405, Plaquemine, Iberville Parish, Louisiana.

"RCRA Permit" means the full permit, with RCRA and HSWA portions.

"RFA" means RCRA Facility Assessment.

"RFI" means RCRA Facility Investigation.

"Release" means any spilling, leaking, pouring, emitting, emptying, discharging, injecting, pumping, escaping, leaching, dumping or disposing of hazardous wastes (including hazardous constituents) into the environment (including the abandonment or discarding of barrels, containers, and other closed receptacles containing hazardous wastes or hazardous constituents).

"SARA" means Superfund Amendments and Reauthorization Action of 1986.

"Solid Waste Management Unit" (SWMU) means any discernable unit at which solid wastes have been placed at any time, irrespective of whether the unit was intended for the management of solid or hazardous waste. Such units include any area at a facility at which solid wastes have been routinely and systematically released.

"Stabilization" is an action taken for the purpose of controlling or abating threats to human health or the environment from releases or preventing or minimizing the further spread of contaminants while long-term remedies are pursued.

If, subsequent to the issuance of this Permit, regulations are promulgated which redefine any of the above terms, the Administrative Authority may, at its discretion, apply the new definition to this Permit.

All regulating citations are defined as being the regulations in effect on the date of issuance of this permit. New and/or amended regulations are not included as Permit requirements until permit modification procedures as specified in Condition II.C of the permit and LAC 33:V.321 are completed.

II. GENERAL PERMIT CONDITIONS

II.A. DURATION OF PERMIT

This permit is effective as of the date indicated on the accompanying signature page and shall remain in effect for a maximum period of ten (10) years from the effective date, unless suspended, modified, revoked and reissued or terminated for just cause.

II.B. EFFECT OF PERMIT

This permit authorizes the Permittee to store, treat, and dispose hazardous waste in accordance with the conditions of this permit. This permit also authorizes the Permittee to conduct post-closure care activities associated with the Northwest Landfill/Corrective Action Management Unit in accordance with the conditions of this permit and LAC 33:V.Chapter 35 and LAC 33:V.2521. The Permittee is prohibited from any storage, treatment or disposal of hazardous waste not authorized by statute, regulation or this permit. Compliance with this permit, LAC 33:V.Subpart 1 and HSWA, constitutes compliance, for purposes of enforcement, with Subtitle C of RCRA and Chapter 9 of the Louisiana Environmental Quality Act (Act). However, compliance with the terms of this permit does not constitute a defense to any order issued or any action brought under Condition 3013 or Condition 7003 of RCRA, or under Condition 106 (a) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) {42 U.S.C. 9606 (a)}.

In accordance with LAC 33:V.307.B and C, issuance of this permit does not convey property rights of any sort or any exclusive privilege; nor does it authorize any injury to persons or property, any invasion of other private rights, or any infringement of State or local law or regulations.

II.C. PERMIT ACTIONS

Any inaccuracies found in the permit application may be cause for revocation or modification of this permit. The Permittee must inform the Administrative Authority of any deviation from, changes or inaccuracies in the information in the permit application.

The Administrative Authority may also suspend, modify, revoke and reissue, or terminate for cause when necessary to be protective of human health or the environment as specified in 40 CFR 270.41, 270.42, 270.43 or LAC 33:V.309.F, 311.A or 323. The Administrative Authority may modify the permit when the standards or regulations on which the permit was based have been changed by promulgation of amended standards or regulations or by judicial decision after the permit was issued. The filing of a request for permit modification, revocation and reissuance, or termination or the notification of planned changes or anticipated noncompliance on the part of Permittee does not stay the applicability or enforceability of any permit condition.

II.D. SEVERABILITY

The conditions of this permit are severable and if any provision of this permit or the application of any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances and the remainder of this permit shall not be affected thereby.

II.E. DUTIES AND REQUIREMENTS

II.E.1. Duty to Comply

The Permittee shall comply with all conditions of this permit, except to the extent and for the duration such noncompliance may be authorized by an emergency permit, as described in LAC 33:V.701. Any permit noncompliance, other than noncompliance authorized by an emergency permit, constitutes a violation of the LAC 33:V.Subpart 1 and the Environmental Quality Act and is grounds for enforcement action which may include permit termination, permit revocation and reissuance, permit modification, or denial of permit renewal application.

II.E.2. Duty to Reapply

If the Permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the Permittee must reapply for the permit as required by the LAC 33:V.303.N and 309.B. Notification shall be at least 180 calendar days before the permit expires.

II.E.3. Permit Extension

This permit and all conditions herein will remain in effect beyond the permit's expiration date until the Administrative Authority issues a final decision on the re-application, provided the Permittee has submitted a timely, complete new permit application as provided in LAC 33:V.309.B and 315.A.

II.E.4. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

II.E.5. Duty to Mitigate

The Permittee shall immediately take all reasonable steps to minimize or correct any adverse impact on the environment resulting from noncompliance with this permit as required by LAC 33:V.309.D.

II.E.6. Proper Operation and Maintenance

The Permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related ancillary equipment) that are installed or used by the Permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of the permit.

II.E.7. Duty to Provide Information

The Permittee shall furnish to the Administrative Authority, within a reasonable time, any information which the Administrative Authority may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The Permittee shall also furnish to the Administrative Authority upon request, copies of records required by this permit and in accordance with LAC 33:V.309.H.

II.E.8. Inspection and Entry

The Permittee shall allow the Administrative Authority or an authorized representative, upon the presentation of credentials and other documents as may be required by law, to:

II.E.8.a. enter upon the Permittee's premises where a regulated activity is located or conducted, or where records must be maintained under the conditions of this permit;

II.E.8.b. have access to and copy, at reasonable times, any records that must be maintained under the conditions of this permit;

II.E.8.c. inspect, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, or operation regulated or required under this permit; and

II.E.8.d. sample or monitor, at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Administrative Authority any substances or parameters at any location.

II.E.9. Sample Monitoring and Records

II.E.9.a. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. The method used to obtain a representative sample of the waste to be analyzed must be the appropriate method from Appendix I of 40 CFR Part 261. Laboratory methods must be those specified in Test Methods for Evaluating Solid Waste: Physical/Chemical Methods, "SW-846", latest revision; Manual of Ground Water Quality Sampling Procedures, 1981, EPA-600/2-81-160, as revised; Procedures Manual for Ground Water Monitoring at Solid Waste Disposal Facilities, 1977, EPA-530/SW-611, as revised; or an equivalent method as specified in the attached Waste Analysis Plan referenced in Attachment 1.

II.E.9.b. Records of monitoring information shall include:

II.E.9.b.(1). the date, exact place, and time of sampling or measurements;

II.E.9.b.(2). the name(s) and signature(s) of the individual(s) who performed the sampling or measurements:

II.E.9.b.(3). the date(s) analyses were performed;

II.E.9.b.(4). the name(s) and signature(s) of the individual(s) who performed the analyses;

II.E.9.b.(5). the analytical techniques or methods used;

II.E.9.b.(6). the results of such analyses; and

II.E.9.b.(7). associated quality assurance performance data.

II.E.9.c. Laboratory Quality Assurance/Quality Control

In order to ensure the accuracy, precision, and reliability of data generated for use, the Permittee shall submit a statement, certified as specified in LAC 33:V.513 and included in the annual report, indicating that:

II.E.9.c.(1). any commercial laboratory providing analytical results and test data to the Department required by this permit is accredited by the Louisiana Environmental Laboratory Accreditation Program (LELAP) in accordance with LAC 33:I. Subpart 3, Chapter 45. Laboratory data generated by commercial laboratories not accredited under LELAP will not be accepted by the Department.

LAC 33:I.Subpart 3 (Chapters 45-49) provides requirements for the accreditation program. Regulations and a list of labs that have applied for accreditation are available on the LDEQ website located at: http://www.deq.louisiana.gov/portal/tabid/2412/Default.aspx.

In accordance with LAC 33:V.4501, the requirements for LELAP accreditation applies whenever data is:

- submitted on behalf of a facility;
- required as part of a permit application;
- required by order of the Department;
- required to be included in a monitoring report submitted to the Department;
- required to be submitted by contract; or
- otherwise required by Department regulations.

This includes, but is not limited to, data from RCRA Trial Burns, Risks Burns, Risk Assessments, MACT Comprehensive Performance Tests, and data used for continuing compliance demonstrations.

II.E.9.c.(2). If the Permittee decides to use its own in-house laboratory for test and analysis, the laboratory is not required to be accredited by LELAP. However, the laboratory must document quality assurance/quality control procedures to the Administrative Authority.

II.E.9.c.(3). For approval of equivalent testing or analytical methods, the Permittee may petition for a regulatory amendment under LAC 33:V.105.I and LAC 33:I.Chapter 9. In cases where an approved methodology for a parameter/analyte is not available or listed, a request to utilize an alternate method shall be submitted to the Administrative Authority for approval. Documentation must be submitted to the LDEQ that will verify that the results obtained from the alternate method are equal to or better than those obtained from EPA-accepted methods, as well as those deemed equivalent by the LDEQ.

II.E.10. Retention of Records

The Permittee shall maintain records through the active life of the facility (including operation, closure and post-closure periods) as required by LAC 33:V.309.J and LAC 33:V.1529.A, B, and C. All records, including plans, must be furnished upon request and made available at all reasonable times as required by LAC 33:V.1529.C. File copies shall be kept for LDEQ Inspection for a period of not less than three years as required by LAC 33:V.317.B.

The Permittee shall, for the life of the permit, maintain records of all data used to complete the application for this permit and any supplemental information submitted under the Louisiana Hazardous Waste Control Law (LA. R.S. 30:2171 et seq.).

II.E.11. Notices of Planned Physical Facility Changes

The Permittee shall give notice to the Administrative Authority, as soon as possible, of any planned physical alterations or additions to the permitted facility, in accordance with LAC 33:V.309.L.1.

II.E.12. Physical Facility after Modification

For any new or existing unit being modified, the Permittee may not manage hazardous waste in the modified portion of the unit until the unit is complete and:

II.E.12.a. the Permittee has submitted to and received approval from the Administrative Authority, by certified mail or hand delivery, a letter signed by the Permittee and an independent registered professional engineer stating that the unit is complete and has been constructed or modified in compliance with the permit; and

II.E.12.b. the Administrative Authority has inspected the modified unit following a request to make final inspection by the Permittee and finds it is in compliance with the conditions of the permit and all applicable sections of LAC 33:V.Subpart 1, and has issued an Order to Proceed. The Permittee may then commence treatment, storage, or disposal of hazardous waste.

II.E.13. Anticipated Noncompliance

The Permittee shall give advance notice to the Administrative Authority of any planned changes in the permitted facility or activity that may result in noncompliance with permit requirements.

II.E.14. Transfer of Permits

This permit may be transferred to a new owner or operator only if it is modified or revoked and reissued pursuant to LAC 33:V.309.L.4, 321.B, 321.C.4, and 1531.D and E, as applicable.

II.E.15. Compliance Schedules

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than fourteen (14) days following each schedule date as required by LAC 33:V.309.L.6.

II.E.16. Emergency Unauthorized Discharge Notification

In accordance with LAC 33:I.3915, in the event of an unauthorized discharge that results in an emergency condition (an emergency condition is any condition which could be reasonably expected to endanger the health and safety of the public, cause significant adverse impact to the land, water, or air environment, or cause severe damage to property), the Permittee shall notify the DPS (Department of Public Safety) 24-hour Louisiana Emergency Hazardous Materials Hotline by telephone at (225) 925-6595 immediately, but in no case later than one (1) hour after learning of the discharge. The DPS 24-hour Louisiana Emergency Hazardous Materials Hotline will subsequently notify the Department regarding the details of the discharge.

II.E.17. Non-Emergency Unauthorized Discharge Notification

In accordance with LAC 33:I.3917, in the event of an unauthorized discharge that exceeds a reportable quantity specified in LAC 33:I.Chapter 39.Subchapter E and/or results in contamination of the groundwaters of the state but does not result in an emergency condition, the Permittee shall promptly notify the Department within twenty-four (24) hours after learning of the discharge. Notification shall be made to the Office of Environmental Compliance, Emergency and Radiological Services Division, Single Point of Contact (SPOC) in accordance with the procedure and content requirements specified in LAC 33:I.3923.

II.E.18. Unauthorized Discharge to Groundwater Notification

In accordance with LAC 33:I.3919, in the event of an unauthorized discharge resulting in contamination of groundwaters of the state by moving in, into, within or on any saturated subsurface strata, the Permittee shall promptly notify the Department within seven (7) days after learning of the discharge. Notification shall be made to the Office of Environmental Compliance, Emergency and Radiological Services Division, SPOC in accordance with the procedure and content requirements specified in LAC 33:I.3925.

II.E.19. Written Notification Reports for Unauthorized Discharges

The Permittee shall submit written reports to the SPOC for any unauthorized discharges requiring notification under Condition II.E.16 through Condition II.E.18. The written report shall be submitted in accordance with the procedure and content requirements specified in LAC 33:I.3925.

II.E.20. Noncompliance Reporting

The Permittee shall report orally within twenty-four (24) hours any noncompliance with the permit not reported under Condition II.E.16 through Condition II.E.18 that may endanger the human health or the environment. This report shall include at minimum the following information:

II.E.20.a. information concerning the release of any hazardous waste that may endanger public drinking water supplies; and

II.E.20.b. information concerning the release or discharge of any hazardous waste, or of a fire or explosion at the facility, that could threaten the environment or human health outside the facility. The description of the occurrence and its cause shall include:

II.E.20.b.(1). name, address, and telephone number of the owner or operator;

II.E.20.b.(2). name, address, and telephone number of the facility;

II.E.20.b.(3). date, time, and type of incident;

II.E.20.b.(4). name and quantity of materials involved;

II.E.20.b.(5). the extent of injuries, if any;

II.E.20.b.(6). an assessment of actual or potential hazard to the environment and human health outside the facility, where this is applicable; and

II.E.20.b.(7). estimated quantity and disposition of recovered material that resulted from the incident.

II.E.21. Follow-up Written Report of Noncompliance

The Permittee shall provide a written submission within five (5) days after the time the Permittee becomes aware of any noncompliance which may endanger human health or the environment and reported under Condition II.E.20. The written submission shall contain a description of the noncompliance and its cause; the periods of noncompliance (including exact dates and times); whether the noncompliance has been corrected; and if not, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance. If the Administrative Authority waives the requirement, then the Permittee submits a written report within fifteen (15) days after the time the Permittee becomes aware of the circumstances, as required by LAC 33:V.309.L.7.

II.E.22. Other Noncompliance

The Permittee shall report all other instances of noncompliance not otherwise required to be reported above, at the time required monitoring reports are submitted. The reports shall contain the information listed in Condition II.E.20.

II.E.23. Other Information

Whenever the Permittee becomes aware that it failed to submit any relevant facts in the permit application, or that it submitted incorrect information in a permit application, or in any report to the Administrative Authority, the Permittee shall promptly submit such facts or information.

II.E.24. Signatory Requirement

All applications, reports or other information submitted to the Administrative Authority shall be signed and certified according to LAC 33:V.507, 509, 511, and 513.

II.E.25. Schedule of Compliance

II.E.25.a. Within sixty (60) days of the effective date of this permit, the Permittee must submit documentation demonstrating that the secondary containment systems for all hazardous waste tanks have been lined with an impervious liner in accordance with LAC 33:V.1907.C.1 and 1907.E and Condition V.A.3.b.(4) of the permit.

II.E.25.b. Within ninety (90) days of the effective date of this permit, the Permittee must submit whole and complete versions of the following plans in order that they may be incorporated by reference into the permit:

II.E.25.b.(1). Revised Closure Plans that address outstanding comments (provided to the Permittee under separate cover) relating to the Closure Plans currently referenced in Attachment 1 of this permit.

II.E.25.b.(2). Revised Post-Closure Plan that includes all revisions required during the permit application review process and addresses outstanding comments (provided to the Permittee under separate cover) relating to the Post-Closure Plan currently referenced in Attachment 1 of this permit.

II.E.25.b.(3). Revised closure and post-closure cost estimates that address outstanding comments (provided to the Permittee under separate cover) relating to the closure and post-closure cost estimates currently referenced in Attachment 1 of this permit.

II.E.25.b.(4). Revised Groundwater Detection Monitoring Plan that includes all revisions required during the permit application review process and addresses outstanding comments (provided to the Permittee under separate cover) relating to the Groundwater Detection Monitoring Plan (and revisions) referenced in Attachment 1 of this permit. Additionally, the Groundwater Detection Monitoring Plan

must be revised to specify that four (4) samples will be taken from each upgradient and point of compliance well specified in Tables VI-A of this permit.

II.E.25.b.(5). Revised Inspection Plan and Schedule that incorporates all revisions required during the permit application review process relating to the Inspection Plan and Schedule referenced in Attachment 1 of this permit.

II.E.25.b.(6). Revised Personnel Training Plan that incorporates all revisions required during the permit application review process relating to the Personnel Training Plan referenced in Attachment 1 of this permit.

II.E.25.b.(7). Revised landfill operation, design, and material specifications that incorporate all revisions required during the permit application review process as referenced in Attachment 1 of this permit.

II.E.25.c. Within ninety (90) days of the Administrative Authority's Approval of the revised Closure Plans, Post-Closure Plan and closure/post-closure cost estimates submitted by the Permittee in accordance with Conditions II.E.25.b.(1)-(3), the Permittee must submit revised and current financial assurance documentation accounting for the aforementioned approved closure/post-closure cost estimates.

II.E.25.d. Within ninety (90) days of the effective date of this permit, the Permittee must submit material clarifying and justifying the appropriate background concentrations for the naturally occurring groundwater monitoring parameters included in Tables VI-B and VI-C of this permit. The Administrative Authority's outstanding comments pertaining to background concentrations for naturally occurring groundwater monitoring parameters will be provided to the Permittee under separate cover.

II.E.25.e. Within sixty (60) days of the effective date of this permit, the Permittee shall submit a Notice of Intent (NOI) indicating the Permittee intends to utilize the Corrective Action Strategy (CAS), as described in Condition VIII of this permit, to govern corrective action of onsite releases. The NOI shall be submitted in accordance with content requirements specified in Condition VIII.B.1.

II.E.25.f. Within one-hundred and eighty (180) days of the effective date of this permit, the Permittee shall submit the information requested in Condition VIII, Appendix 1 under the heading "Additional SWMU/AOC/Release Area Information or Data to Be Provided by the Permittee". [Note: The information requested under Condition II.E.25.f is not being requested to

resolve non-compliance on the part of the Permittee. Rather, this information is being requested to bring resolution to the 1986 RFA prepared for EPA Region VI by A.T. Kearney, Inc. for the Permittee's Plaquemine facility.]

II.E.26. Additional Operating Standards

(RESERVED)

II.E.27. Updated Documents To Be Submitted Prior To Operation

(RESERVED)

II.E.28. Documents To Be Maintained at Facility Site

II.E.28.a. The Permittee shall maintain at the facility, until closure/post-closure is completed and certified by an independent registered professional engineer, the following documents and any amendments, revisions, and modifications to these documents. Any revision or changes shall be submitted with the annual report unless previously submitted.

II.E.28.a.(1). Waste Analysis Plan (WAP) submitted in accordance with LAC 33:V.1519 and approved by the Administrative Authority (see Attachment 1).

II.E.28.a.(2). Personnel Training Plan and the training records as required by LAC 33:V.1515 (see Attachment 1).

II.E.28.a.(3). Contingency Plan submitted in accordance with LAC 33:V.1513 and approved by the Administrative Authority (see Attachment 1).

II.E.28.a.(4). Arrangements with local authorities in accordance with LAC 33:V.1511.G (see Attachment 1).

II.E.28.a.(5). Closure and Post-Closure Plans submitted in accordance with LAC 33:V.3511and 3523 and approved by the Administrative Authority, as well as any post-closure care requirements that may be required initially or through permit modifications in accordance with LAC 33:V.3523 (see Attachment 1).

II.E.28.a.(6). Cost estimate for facility closure, post-closure care, and corrective action submitted in accordance with LAC 33:V.3705, 3709, and 3322.B and C and approved by the Administrative Authority, as well as any post-closure cost estimate that may be required initially or through permit modifications in accordance with LAC 33:V.3709 (see Attachment 1).

II.E.28.a.(7). Operating records and Operations Plans as required by LAC 33:V.1529, 1911.D, and 3007.K.

II.E.28.a.(8). Inspection Plan and schedule developed in accordance with LAC 33:V.517.G and 1509.B and approved by the Administrative Authority (see Attachment 1).

II.E.28.a.(9). Security Plan developed in accordance with LAC 33:V.1507 (see Attachment 1).

II.E.28.a.(10). Groundwater Detection Monitoring Plan developed in accordance with LAC 33:V.Chapter 33 (see Attachment 1).

II.E.28.a.(11). Landfill operational, design, and material specifications for the permitted active and post-closure landfill units referenced in Tables IV-D and IV-E (see Attachment 1).

II.E.28.a.(12). The latest approved version of the "Remediation Plan – Northwest Landfill" (see Attachment 1).

II.E.28.b. All proposed amendments, revisions and modifications to any plan or cost estimates required by this permit shall be submitted to the Administrative Authority for approval.

II.E.29. Annual Report

The Permittee shall submit an annual report covering all hazardous waste units and activities during the previous calendar year as required by LAC 33:V.1529.D.

II.E.30. Manifest

The Permittee shall report manifest discrepancies and un-manifested waste as required by LAC 33:V.309.L.8 and 9 and LAC 33:V.1107.

II.E.31. Emissions

Emissions from any hazardous waste facility shall not violate the Louisiana Air Quality Regulations. If air quality standards are exceeded, the site will follow air regulation protocol.

II.E.32. Water Discharges

Water discharges from any hazardous waste facility shall not violate the Louisiana Water Quality Regulations. If water standards are exceeded, the site will follow water quality regulation protocol.

II.E.33. Non-Listed Hazardous Waste Facilities

This permit is issued for those hazardous waste facilities listed in Condition IV (Permitted Facilities). If the Permittee determines that an un-permitted hazardous waste facility exists, the Permittee must immediately notify the Administrative Authority in accordance with Condition II.E.22 of the General Permit Conditions.

II.E.34. Compliance With Land Disposal Restrictions

The Permittee shall comply with those land disposal restrictions set forth in LA. R.S. 30:2193, all regulations promulgated thereunder, and the HSWA portion of this permit (Conditions VII and VIII).

II.E.35. Establishing Permit Conditions

Permits for facilities with pre-existing groundwater contamination are subject to all limits, conditions, remediation and corrective action programs designated under LAC 33:V.311.D and LAC 33:V.3303.

II.E.36. Obligation for Corrective Action

Owners or operators of hazardous waste management units must have all necessary permits during the active life of the unit and for any period necessary to comply with the corrective action requirements in Condition VIII. The facility is obligated to complete facility-wide corrective action regardless of the operational status of the facility.

II.E.37. Attachments and Documents Incorporated by Reference

All attachments and documents required by this permit, including all plans and schedules, are incorporated, upon approval by the Administrative Authority, into this permit by reference and become an enforceable part of this permit. When applicable, the Permittee must modify the permit according to LAC 33:V.Chapter 3. Since required items are essential elements of this permit, failure to submit any of the required items or submission of inadequate or insufficient information may subject the Permittee to enforcement action, which may include fines, suspension, or revocation of the permit. Also, where applicable, the Permittee must meet all the permit modification requirements contained in LAC 33:V.321, 322, and 323.

Any noncompliance with approved plans and schedules shall be termed noncompliance with this permit. Written requests for extension of due dates for submittals may be granted by the Administrative Authority.

If the Administrative Authority determines that actions beyond those provided for, or changes to what is stated herein, are warranted, the Administrative Authority may modify this permit according to procedures in LAC 33:V.321.

III. GENERAL FACILITY CONDITIONS

III.A. DESIGN AND OPERATION OF ALL FACILITIES

III.A.1. The Permittee must maintain and operate all facilities to minimize the possibility of a fire, explosion, or any unauthorized sudden or non-sudden release of hazardous waste constituents to air, soil, or water that could threaten human health or the environment.

III.A.2. No off-site generated hazardous wastes may be received at the Permittee's Plaquemine facility (LAD 008187080) for storage, treatment, or disposal.

III.B. REQUIRED NOTICE

(RESERVED)

III.C. GENERAL WASTE ANALYSIS

The Permittee shall follow the procedures described in the Waste Analysis Plan (WAP) referenced in Attachment 1 and in accordance with LAC 33:V.1519.

III.C.1. The Permittee shall review the WAP annually and report to the Administrative Authority in the annual report whether any revision is required to stay abreast of changes in EPA methods and/or State regulatory provisions.

III.C.2. Annually, the Permittee shall submit a certified statement that indicates that any laboratory (i.e., on-site laboratory or contract laboratory) that provides chemical analyses, analytical results, or other test data to the department, by contract or by agreement, is accredited in accordance with the laboratory accreditation requirements of LAC 33:I.Chapter 45. This written statement shall be certified as specified in LAC 33:V.513 and included in the annual report. This documentation shall be resubmitted when a different laboratory is contracted for services.

III.C.3. If there is reason to believe that the hazardous waste has changed or the operation generating the hazardous waste has changed, the Permittee shall review and re-characterize all potentially impacted hazardous waste streams generated by the Permittee on-site and treated, stored, and/or disposed on-site. The Permittee must re-characterize wastes in accordance with LAC 33:V.1519.A.3. This re-characterization shall include laboratory analyses which provide information needed to properly treat, store, and dispose of the hazardous waste, including physical characteristics and chemical components of the waste. The results of this re-characterization shall be summarized in the Permittee's Annual Report.

III.C.4. In accordance with LAC 33:V.1519.B, the WAP must meet all sampling and QA/QC protocols contained in Condition II.E.9. All test procedures used by the

Permittee shall be maintained on file by the Permittee and made available to the LDEQ upon request.

III.D. SECURITY

The Permittee must comply with the security provisions of LAC 33:V.1507, as referenced in Attachment 1.

III.E. GENERAL INSPECTION REQUIREMENTS

The Permittee must follow the approved Inspection Plan referenced in Attachment 1. The Permittee must remedy any deterioration or malfunction discovered by an inspection as required by LAC 33:V.1509.C. Records of inspections must be kept as required by LAC 33:V.1509.D. The inspection schedule must include the regulatory requirements of LAC 33:V.517.G, 1509, 1911, 2109, 2507, 3007.J, and 3119.

III.F. PERSONNEL TRAINING

The Permittee must conduct personnel training as required by LAC 33:V.1515.A, B, and C. The Permittee shall follow the approved Personnel Training Plan referenced in Attachment 1. The Permittee shall maintain all training documents and records as required by LAC 33:V.1515.D and E.

III.G. GENERAL REQUIREMENTS FOR IGNITABLE, REACTIVE, OR INCOMPATIBLE WASTE

The Permittee must take precautions as required by LAC 33:V.1517 to prevent accidental ignition or reaction of ignitable or reactive wastes. The Permittee shall store ignitable, reactive, or incompatible wastes only in accordance with LAC 33:V.1517, 1917, 1919, 2113, 2115, 2511, and 2513.

III.H. LOCATION STANDARDS

III.H.1. The Permittee has furnished that it is in compliance with seismic standards as required by LAC 33:V.517.T.

III.H.2. The Permittee must not manage any hazardous waste on any portion of the property that lies within the 100 year flood plain (as identified in the Flood Insurance Rating Map) unless such areas are raised above this flood level or other means (e.g., levees) are provided to protect such areas from washouts, overtopping by wave action, soil erosion or other effects of such a flood as required by LAC 33:V.1503.B.3. Such site improvements must be certified by independent licensed professional engineers and approved by the Administrative Authority prior to any hazardous waste and/or hazardous waste units being placed thereon.

III.I. PRECIPITATION RUN-ON AND RUN-OFF

The Permittee must provide for the control by diversion and/or containment of run-on and run-off resulting from a rainfall occurring during a period of twenty-four (24) hours as defined by local rainfall records and LAC 33:V.1503.B.2. The Permittee shall comply with the requirements of LAC 33:V.1907.E.1.b, 2111.B.4, and 2503.D-F.

III.J. HURRICANE EVENTS

The Permittee must initiate those applicable portions of the Contingency Plan during a hurricane as well as appropriate actions required by LAC 33:V.1507, 1509 and 1511.

III.K. PREPAREDNESS AND PREVENTION

III.K.1. Required Equipment

At a minimum, the Permittee must install and maintain the equipment set forth in the Contingency Plan, as required by LAC 33:V.1511.C.

III.K.2. Testing and Maintenance of Equipment

The Permittee must test and maintain the equipment specified in Condition III.K.1 to insure its proper operation in time of emergency. The testing and maintenance of the equipment must be documented in the operating record.

III.K.3. Access to Communications or Alarm Systems

The Permittee must maintain access to the communications or alarm system as required by LAC 33:V.1511.E.1 and 1511.E.2.

III.K.4. Required Aisle Space

In no case shall aisle space be less than two (2) feet. In addition, the Permittee shall maintain adequate aisle space as required by LAC 33:V.1511.F.

III.K.5. Arrangements with Local Authorities

The Permittee shall document in the annual report that the requirements of LAC 33:V.1511.G have been met. This documentation shall include those state and local agencies involved and those facilities and operations covered. Documentation of written arrangements with state and local agencies shall also be included in this report. Where state or local authorities decline to enter into such arrangements, the Permittee must document the refusal in the operating record.

III.L. CONTINGENCY PLAN

III.L.1. Implementation of Plan

The Permittee must immediately carry out the provisions of the approved Contingency Plan referenced in Attachment 1, and follow the emergency procedures described by LAC 33:V.1513.F whenever there is a fire, explosion, or release of hazardous waste or hazardous waste constituents that threaten or could threaten human health or the environment.

III.L.2. Copies of Plan

The Permittee must comply with the requirements of LAC 33:V.1513.C.

III.L.3. Amendments to Plan

The Permittee must review and immediately amend, if necessary, the Contingency Plan as required by LAC 33:V.1513.D.

III.L.4. Emergency Coordinator

The Permittee must comply with the requirements of LAC 33:V.1513.E concerning the emergency coordinator.

III.M. MANIFEST SYSTEM

The Permittee shall comply with the manifest requirements of LAC 33:V.Chapter 11.

III.N. RECORDKEEPING AND REPORTING

III.N.1. Operating Record

The Permittee shall maintain a written operating record at the facility in accordance with LAC 33:V.1529.A, B, and C and the approved Operations Plan.

III.N.2. Annual Report

The Permittee must comply with the annual report requirements of LAC 33:V.1529.D.

III.N.3. Operations Manual

The Permittee shall compile and keep current an operations manual covering all aspects of the Permittee's storage facilities.

III.O. CLOSURE

The Permittee shall address the following regulatory citations in the Closure and Post-Closure Plans: LAC 33:V.1915, 2117, 2521, 3005.I, 3121, 3503, 3505, 3507, 3509, 3511, 3513, and 3515. The Administrative Authority may re-evaluate the adequacy of the Closure and Post-Closure Plans and/or the confirmatory sampling procedures prior to the commencement of closure or during the post-closure care period (e.g., the review and evaluation of permit renewal applications, permit modifications, and notifications of intent to close).

III.O.1. Closure Performance Standard

The Permittee shall close the facility in accordance with the approved Closure Plans referenced in Attachment 1 and in accordance with the applicable sections of LAC 33:V.3507.

III.O.2. Amendment to Closure Plan

The Permittee shall amend the Closure Plans where necessary, in accordance with LAC 33:V.3511.C. Any modification shall be subject to LAC 33:V.321, 322 and 323, where applicable.

III.O.3. Notification of Closure

The Permittee shall notify the Administrative Authority at least forty-five (45) days prior to the date it expects to begin closure in accordance with LAC 33:V.3511.D.

III.O.4. Time Allowed For Closure

After receiving the final volume of hazardous waste, the Permittee shall treat or remove from the site all hazardous waste in accordance with the schedule specified in the Closure Plans referenced in Attachment 1 and in accordance with LAC 33:V.3513.

III.O.5. Disposal or Decontamination of Equipment

The Permittee shall decontaminate and dispose all facility equipment in accordance with the approved Closure Plans referenced in and in accordance with LAC 33:V.3515.

III.O.6. Certification of Closure

The Permittee shall certify that the facility has been closed in accordance with the specifications in the approved Closure Plans as required by LAC 33:V.3517.

III.O.7. Inventory at Closure

The Permittee shall be responsible for closure costs based upon the maximum permitted facility inventories listed below in Tables III-A, III-B, and III-C.

TABLE III-A
(13) Existing Hazardous Waste Tanks

TANKS	SERVICE	WASTE	MAXIMUM PERMITTED CAPACITY (GALLONS)
T-400-2	Liquid Organic Hazardous Wastes	Numerous waste streams carrying F, K, P, U and D waste codes (see WAP)	49,800
T-410	Liquid Organic Hazardous Wastes	Numerous waste streams carrying F, K, P, U and D waste codes (see WAP)	375
D-13	Liquid Organic Hazardous Wastes	Numerous waste streams carrying F, K, P, U and D waste codes (see WAP)	2,500
D-15	Liquid Organic Hazardous Wastes	Numerous waste streams carrying F, K, P, U and D waste codes (see WAP)	22,676
D-42B-1	Liquid Organic Hazardous Wastes	Numerous waste streams carrying F, K, P, U and D waste codes (see WAP)	2,768
D-92-A	Liquid Organic Hazardous Wastes	Numerous waste streams carrying F, K, P, U and D waste codes (see WAP)	370
D-700	Liquid Organic Hazardous Wastes	Numerous waste streams carrying F, K, P, U and D waste codes (see WAP)	2,800
T-701	Liquid Organic Hazardous Wastes	Numerous waste streams carrying F, K, P, U and D waste codes (see WAP)	50
D-750	Liquid Organic Hazardous Wastes	Numerous waste streams carrying F, K, P, U and D waste codes (see WAP)	940
D-751	Liquid Organic Hazardous Wastes	Numerous waste streams carrying F, K, P, U and D waste codes (see WAP)	6,018
T-130[1]	Liquid Hazardous Wastes	Numerous waste streams carrying F, K, P, U and D waste codes (see WAP)	0
T-135[1]	Liquid Hazardous Wastes	Numerous waste streams carrying F, K, P, U and D waste codes (see WAP)	0
T-255[1]	Liquid Hazardous Wastes	Numerous waste streams carrying F, K, P, U and D waste codes (see WAP)	0

[1] Tanks T-130, T-135, and T-255 are undergoing closure and no longer actively managing hazardous waste (see Condition V.A.11).

TABLE III-B
(5) Existing Container Storage Areas (CSAs)

CSA	LOCATION	WASTE	MAXIMUM PERMITTED CAPACITY (GALLONS)
CSA A	Environmental Operations Plant	Numerous waste streams carrying F, K, P, U and D waste codes (see WAP)	600,000 pounds
CSA B	Environmental Operations Plant	Numerous waste streams carrying F, K, P, U and D waste codes (see WAP)	600,000 pounds
CSA C	Environmental Operations Plant	Numerous waste streams carrying F, K, P, U and D waste codes (see WAP)	250,000 pounds
CSA D*	Environmental Operations Plant	Numerous waste streams carrying F, K, P, U and D waste codes (see WAP)	24,000 gallons
CSA E	Environmental Operations Plant	Numerous waste streams carrying F, K, P, U and D waste codes (see WAP)	210,000 gallons

*CSA D is comprised of 2 sub-areas: D-1 and D-2. Maximum permitted capacity listed for CSA D is the combined permitted capacity of D-1 and D-2.

TABLE III-C
(6) Thermal Treatment Units (TTUs)

TTU*	LOCATION	SERVICE
Environmental Operations Plant TTU[1] (I-200)	Environmental Operations Plant	Liquid Hazardous Waste Numerous waste streams carrying F, K, P, U and D waste codes (see WAP)
Solvents/EDC TTU (F-700)	Solvents/EDC Plant	Liquid Hazardous Waste Numerous waste streams carrying F, K, P, U and D waste codes (see WAP)
Glycol I TTU (R-4)	Glycol I Plant	Liquid Hazardous Waste Numerous waste streams carrying F, K, P, U and D waste codes (see WAP)
Chlorinated Methanes TTU (R-750)	Chlorinated Methanes Plant	Liquid Hazardous Waste Numerous waste streams carrying F, K, P, U and D waste codes (see WAP)
Vinyl II TTU (F-410)	Vinyl II Plant	Liquid Hazardous Waste Numerous waste streams carrying F, K, P, U and D waste codes (see WAP)
Vinyl II TTU (F-420)	Vinyl II Plant	Liquid Hazardous Waste Numerous waste streams carrying F, K, P, U and D waste codes (see WAP)

* Maximum permitted capacities are not applicable to the TTUs. Instead, permit conditions pertaining to the TTUs govern hazardous waste feed rates to the TTUs and emissions from the TTUs.

[1] The Environmental Operations Plant TTU is undergoing closure and no longer actively managing hazardous waste (see Condition V.D.5).

TABLE III-D
(1) Active Landfill

UNIT NAME	UNIT TYPE	CAPACITY
Block 80 Hazardous Waste Landfill	Active Hazardous Waste Landfill	131,000 cubic yards

III.P. POST-CLOSURE

III.P.1. Post-Closure Care

The Permittee must manage the post-closure care of the Northwest Landfill/CAMU as described in Table III-E in accordance with this permit, LAC 33:V. Chapter 35, Subchapter B and LAC 33:V.2521.

TABLE III-E
(1) Closed Landfill/Corrective Action Management Unit (CAMU)

UNIT NAME	UNIT TYPE	CAPACITY
Northwest Landfill/CAMU	Closed Hazardous Waste Landfill/CAMU	120,000 cubic yards

III.P.2. Amendment to Post-Closure Permit Conditions

The Permittee must request modification of any post-closure permit conditions included in this permit when necessary, in accordance with LAC 33:V.3523.D and LAC 33:V.321.

III.P.3. Post-Closure Maintenance

The Permittee must comply with all post-closure requirements contained in LAC 33:V.3519 through 3527, including maintenance and monitoring throughout the post-closure care period specified in LAC 33:V.3521.A.1. The Permittee must maintain all units in post-closure according to the requirements in Condition V.G.

III.P.4. Post-Closure Restrictions

The Administrative Authority may require, at partial and final closure, continuation of any of the security requirements of LAC 33:V.1507, during part or all of the post-closure care period when access by the public or domestic livestock may pose a hazard to human health.

III.P.5. Post-Closure Property or Site Use

III.P.5.a. Post-closure use of property on or in which hazardous wastes remain after partial or final closure must never be allowed to disturb the integrity of the final cover, liner(s), or any other components of the containment system, or the function of the permitted closed unit's monitoring systems, unless the Administrative Authority finds that the disturbance:

III.P.5.a.(1). is necessary to the proposed use of the property, and will not increase the potential hazard to human health or the environment; or

III.P.5.a.(2). is necessary to reduce a threat to human health or the environment.

III.P.5.b. Any post-closure activity other than that specified in this permit must have prior approval of the Administrative Authority.

III.P.6. Post-Closure Contact

The Permittee must provide the name, address, and phone number of the person or office to contact about the permitted post-closure units during the post-closure care period.

III.P.7. Certification of Completion of Post-Closure Care

No later than sixty (60) days after completion of the established post-closure care period for the specified unit, the Permittee must submit to the Administrative Authority, by registered mail, a certification that the post-closure care period for the hazardous waste disposal unit(s) was performed in accordance with the specifications in the approved post-closure plan. The certification must be signed by the Permittee and an independent registered professional engineer. Within sixty (60) days after receipt of the certification the Administrative Authority will notify the owner or operator that he is no longer required to maintain financial assurance for post-closure care of that unit, unless the Administrative Authority has reason to believe that post-closure care was not conducted in accordance with the approved post-closure plan.

The certification of post-closure care shall include the certification statement found in the LAC 33:V.513.A or the current certification statement in the Louisiana hazardous waste regulations at the time of completion of post-closure care.

III.Q. COST ESTIMATES FOR CLOSURE/POST-CLOSURE/CORRECTIVE ACTION

III.Q.1. The Permittee must maintain cost estimates accounting for the costs associated with the execution of closure activities for all permitted units listed in Tables III-A, III-B, III-C, and III-D of this permit in accordance with LAC 33:V.3705 and 3707.

III.Q.2. The Permittee must maintain post-closure cost estimates accounting for the costs associated with the execution of post-closure activities for all permitted units listed in Tables III-D and III-E of this permit in accordance with LAC 33:V.3709.

III.Q.3. The Permittee must maintain cost estimates accounting for the costs associated with corrective action remedy implementation and maintenance required to remediate onsite releases of hazardous constituents to environmental media as required by LAC 33:V.3322.B and C.

III.Q.4. The Permittee shall maintain and adjust all cost estimates referenced in Conditions III.Q.1-3 of this permit for inflation, as specified in LAC 33:3705.B, 3705.C, and for other circumstances that increase the cost estimates.

III.Q.5. The Permittee must adjust any cost estimates within thirty (30) days after approval of changes to or modifications of the closure/post-closure plans or required corrective action activities by the Administrative Authority. The Permittee shall consider the impact of any changes on the cost estimates.

III.Q.6. The closure cost estimate must equal the cost of closure at the point in the facility's operating life when the extent and manner of its operation would make closure most expensive and must be based on costs to the Permittee of hiring a third party to execute all closure activities. The closure cost estimate shall be based on the maximum permitted inventory of each facility specified in Tables III-A, III-B, and III-D of this permit.

III.Q.7. If the Permittee is unable to complete clean closure of all facilities specified in Tables III-A, III-B, and III-C, as per LAC 33:V.Chapter 35 and as acceptable by the Administrative Authority, a Post-Closure Plan must be submitted for each facility failing to achieve clean closure within ninety (90) days from the date that the Permittee or Administrative Authority determines that the unit must be closed as a landfill. The Post-Closure Plan must meet the requirements of LAC 33:V.3523.B.

III.R. FINANCIAL ASSURANCE FOR CLOSURE, POST-CLOSURE, AND CORRECTIVE ACTION

The Permittee shall establish and maintain financial assurance for closure, post-closure, and corrective action, as applicable in accordance with LAC 33:V.3707 for all units listed under Condition III.O.7 and III.P.1 and for all onsite and offsite releases requiring the

implementation of corrective action activities (e.g., investigation, sampling and analysis, corrective action remedies, etc.).

III.S. LIABILITY REQUIREMENTS

The Permittee shall have and maintain liability coverage for sudden accidental occurrences in the amounts of $1,000,000 each occurrence and $2,000,000 annual aggregate, exclusive of legal defense costs, as required by LAC 33:V.3715.A. The Permittee shall have and maintain liability coverage for non-sudden accidental occurrences in the amounts of $3,000,000 each occurrence and $6,000,000 annual aggregate, exclusive of legal defense costs, as specified in LAC 33:V.3715.B.

III.T. INCAPACITY OF THE PERMITTEE

The Permittee must comply with LAC 33:V.3717 whenever bankruptcy is initiated for the Permittee or its institutions providing financial assurance. If insurance is used for compliance with LAC 33:V.3715, the Permittee must immediately notify the Administrative Authority if the insurance company is placed in receivership. The Permittee must establish other financial assurance or liability coverage within sixty (60) days after such an event.

III.U. POST-CLOSURE NOTICES

If the Permittee (or any subsequent Permittee) wishes to remove hazardous wastes, hazardous waste residues, the liner, or contaminated soils from the land upon which the hazardous waste disposal units included in Tables III-D (after closure certification) and III-E of this permit are located, he must request a modification to the permit in accordance with the applicable requirements in LAC 33:V. Chapters 3 and 7. The Permittee must demonstrate that the removal will satisfy the criteria of LAC 33:V.3521. By removing hazardous waste, the Permittee may become a generator of hazardous waste and must manage it in accordance with all applicable requirements of LAC 33:V. Subpart 1. If the Permittee is granted a permit modification or otherwise granted approval to conduct such removal activities, the Permittee may request that the Administrative Authority approve either:

III.U.1. the removal of the notation on the deed to the facility property or other instrument normally examined during title search; or

III.U.2. the addition of a notation to the deed or instrument indicating the removal of the hazardous waste.

IV. PERMITTED FACILITES

IV.A. TANKS

Details of the existing tanks listed in Table IV-A, including design and operational specifications are contained in Condition V.A.

TABLE IV-A
(13) Existing Hazardous Waste Tanks

TANKS	SERVICE	WASTE	MAXIMUM PERMITTED CAPACITY (GALLONS)
T-400-2	Liquid Organic Hazardous Wastes	Numerous waste streams carrying F, K, P, U and D waste codes (see WAP)	49,800
T-410	Liquid Organic Hazardous Wastes	Numerous waste streams carrying F, K, P, U and D waste codes (see WAP)	375
D-13	Liquid Organic Hazardous Wastes	Numerous waste streams carrying F, K, P, U and D waste codes (see WAP)	2,500
D-15	Liquid Organic Hazardous Wastes	Numerous waste streams carrying F, K, P, U and D waste codes (see WAP)	22,676
D-42B-1	Liquid Organic Hazardous Wastes	Numerous waste streams carrying F, K, P, U and D waste codes (see WAP)	2,768
D-92-A	Liquid Organic Hazardous Wastes	Numerous waste streams carrying F, K, P, U and D waste codes (see WAP)	370
D-700	Liquid Organic Hazardous Wastes	Numerous waste streams carrying F, K, P, U and D waste codes (see WAP)	2,800
D-701	Liquid Organic Hazardous Wastes	Numerous waste streams carrying F, K, P, U and D waste codes (see WAP)	50
D-750	Liquid Organic Hazardous Wastes	Numerous waste streams carrying F, K, P, U and D waste codes (see WAP)	940
D-751	Liquid Organic Hazardous Wastes	Numerous waste streams carrying F, K, P, U and D waste codes (see WAP)	6,018
T-130[1]	Liquid Hazardous Waste	Numerous waste streams carrying F, K, P, U and D waste codes (see WAP)	0
T-135[1]	Liquid Hazardous Waste	Numerous waste streams carrying F, K, P, U and D waste codes (see WAP)	0
T-255[1]	Liquid Hazardous Waste	Numerous waste streams carrying F, K, P, U and D waste codes (see WAP)	0

[1] Tanks T-130, T-135, and T-255 are undergoing closure and no longer actively managing hazardous waste (see Condition V.A.11).

IV.B. CONTAINER STORAGE AREAS

Details of the existing container storage areas listed in Table IV-B, including design and operational specifications, are contained in Condition V.B.

TABLE IV-B
(5) Existing Container Storage Areas (CSAs)

CSA	LOCATION	WASTE	MAXIMUM PERMITTED CAPACITY
CSA A	Environmental Operations Plant	Numerous waste streams carrying F, K, P, U and D waste codes (see WAP)	600,000 pounds
CSA B	Environmental Operations Plant	Numerous waste streams carrying F, K, P, U and D waste codes (see WAP)	600,000 pounds
CSA C	Environmental Operations Plant	Numerous waste streams carrying F, K, P, U and D waste codes (see WAP)	250,000 pounds
CSA D*	Environmental Operations Plant	Numerous waste streams carrying F, K, P, U and D waste codes (see WAP)	24,000 gallons
CSA E	Environmental Operations Plant	Numerous waste streams carrying F, K, P, U and D waste codes (see WAP)	210,000 gallons

*CSA D is comprised of 2 sub-areas: D-1 and D-2. Maximum permitted capacity listed for CSA D is the combined permitted capacity of D-1 and D-2.

IV.C. THERMAL TREATMENT UNITS

Details of the existing thermal treatment units listed in Table IV-C, including design and operational specifications, are contained in Conditions V.C through V.E.

TABLE IV-C
(6) Thermal Treatment Units (TTUs)

TTU	LOCATION	SERVICE
Environmental Operations Plant TTU[1] (I-200)	Environmental Operations Plant	Liquid Hazardous Waste *Numerous waste streams carrying F, K, P, U and D waste codes
Solvents/EDC TTU (F-700)	Solvents/EDC Plant	Liquid Hazardous Waste *Numerous waste streams carrying F, K, P, U and D waste codes
Glycol I TTU (R-4)	Glycol I Plant	Liquid Hazardous Waste *Numerous waste streams carrying F, K, P, U and D waste codes
Chlorinated Methanes TTU (R-750)	Chlorinated Methanes Plant	Liquid Hazardous Waste *Numerous waste streams carrying F, K, P, U and D waste codes
Vinyl II TTU (F-410)	Vinyl II Plant	Liquid Hazardous Waste *Numerous waste streams carrying F, K, P, U and D waste codes
Vinyl II TTU (F-420)	Vinyl II Plant	Liquid Hazardous Waste *Numerous waste streams carrying F, K, P, U and D waste codes

* For specific information regarding waste streams treated in the TTUs, see the WAP included in Attachment 1.
[1] The Environmental Operations Plant TTU is undergoing closure and no longer actively managing hazardous waste (see Condition V.D.5).

IV.D. ACTIVE LANDFILL

Details of the existing landfill listed in Table IV-D, including design and operational specifications, are contained in Condition V.F.

TABLE IV-D
(1) Active Landfill

UNIT NAME	UNIT TYPE	CAPACITY
Block 80 HW Landfill	Active Hazardous Waste Landfill	131,000 cubic yards

IV.E. PERMITTED POST-CLOSURE UNITS

Details of the existing post-closure landfill listed in Table IV-E, including design and operational specifications, are contained in Condition V.G.

TABLE IV-E
(1) Closed Landfill/Corrective Action Management Unit (CAMU)

UNIT NAME	UNIT TYPE	CAPACITY
Northwest Landfill/CAMU	Closed Hazardous Waste Landfill/CAMU	120,000 cubic yards

V. PERMIT CONDITIONS APPLICABLE TO PERMITTED FACILITIES

V.A. TANKS

V.A.1. Description of Tank Systems

V.A.1.a. Operation

V.A.1.a.(1). All permitted tanks and associated piping, pumps, instruments, containments, and vent controls shall be operated and maintained in accordance with LAC 33:V.Chapter19, the specification and design criteria provided in the Part II Permit Application, and the design limits specified in Tables V-A-1 and V-A-2.

V.A.1.a.(2). The design temperature and pressure for each tank shall not change from the one listed in Table V-A-1, unless a permit modification is approved by the Department.

V.A.1.b. Permitted Tanks

V.A.1.b.(1). The tanks listed in Table V-A-1 are permitted for hazardous waste storage. These tanks have been certified by an independent, professional engineer licensed in the State of Louisiana and have sufficient structural integrity for the storage of hazardous waste.

V.A.1.b.(2). The tanks listed in Table V-A-1 must be clearly marked with the words "Hazardous Waste" in accordance with LAC 33:V.1109.E.1.d.

V.A.1.b.(3). The Permittee is prohibited from storing or treating hazardous waste in any tank storage system not listed in Table V-A-1 for greater than ninety (90) days, unless an extension is granted by the Administrative Authority in accordance with LAC 33:V.1109.E.2.

V.A.1.b.(4). The Permittee is prohibited from receiving any hazardous waste from off-site.

V.A.1.c. Proposed Tanks

(RESERVED)

Table A-1
DESIGN AND OPERATING PARAMETERS FOR RCRA TANK SYSTEMS

Tank No.	Materials of Construction	Shell Thickness Design (inches)	Minimum Thickness (inches)	Corrosion Allowance (inches)	Secondary Containment Capacity (gallons)	Dimensions	Permitted Capacity (Gals.)	Design Temp. (F)	Design Pressure (PSI)
T-130[1]	SA-285-C Carbon Steel	0.3125	.1875	0.0625	27,000 [1]	144"OD X 24'H	0	200	10
T-135[1]	SA-285-C Carbon Steel	0.3125	.1875	0.0625	27,000 [1]	144"OD X 23'-6"H	0	200	10
T-255[1]	SA-285-C Carbon Steel	0.3125	.1875	0.0625	27,000[1]	144"OD X 23'-6"H	0.	200	10
D-13	Monel/Alloy 400 Steel	0.1875 (shell) 0.250 (head)	.1875	None	45,900	12'L X 6' OD	2,500	650	50
D-15	SA-285-C Carbon Steel	0.9375 (shell) 0.8125 (head)	.558	0.125	45,900	23'-10"L X 12'OD	22,676	600	50
D-42B-1	SA-516-70 Carbon Steel (Teflon Lined)	0.5 (shell) 0.375 (head)	.2474	0.0625	33,370	102"OD X 4'-2" H with conical bottom 7'-3"H and 6" outlet	2,768	300	50
D-92-A	SA-285-C Carbon Steel	0.5 (shell) 0.5 (head)	.1875	0.0625	33,370	7'L X 5'OD	370	600	287
D-700	Monel/Alloy 400 Steel	0.3125 (shell) 0.432 (top)	.232	0.0805	33,370	166"L X 64"OD with one conical end	2,800	600	40
D-701	Carbon Steel (Teflon Lined)	0.322 (nominal Schedule 40 pipe)	.1875	None	50	8" Dia. X 23' H	50	100	150
T-400-2	SA-516-70 Norm.	0.625	.518	0.0625	111,100	17'ID X 23'-4"H	49,800	450	76
T-410-2	SA-106B Carbon Steel	0.5 (shell and bottom)	.1875	0.125	111,100	4'OD X 4'H	375	150	3.5
D-750	SA-516-70 Carbon Steel (Teflon Lined)	0.25	.1808	None[2]	13,086	4'ID X 10'	940	300	18
D-751	SA-516-GR-70 Carbon Steel	0.625	.427	0.123	13,086	9'ID X 16'	6,018	300	150

1.Tanks T-130, T-135, and T-255 share a common secondary containment area and are undergoing closure with I-200. T-250, not listed, has completed closure.
2. Tank D-750 is Teflon lined. No corrosion allowance is defined, but the use of common ¼ inch sheet with a minimum thickness of 0.1875 defaults to an allowance of 0.0625 inches of corrosion allowance.

TABLE V-A-2
DESIGN AND OPERATING PARAMETERS FOR RCRA TANK SYSTEMS

Tank No.[1]	Year Put Into Service	Design Standard	Inspection Standard	Air Emission Compliance
D-13	1970	ASME Section VIII, Div. 1 (1968)	API 510	40 CFR 60, Subpart H
D-15	2005	ASME Section VIII, Div. 1 (2004)	API 510	40 CFR 60, Subpart H
D-42B-1	1999	ASME Section VIII, Div. 1 (1995)	API 510	40 CFR 60, Subpart H
D-92-A	1983	ASME Section VIII, Div. 1 (1977)	API 510	40 CFR 60, Subpart H
D-700	1976	ASME Section VIII, Div. 1 (1974)	API 510	40 CFR 60, Subpart H
D-701	2001	ASME B31.3	ASME B31.3	40 CFR 60, Subpart H through D-700
T-400-2	1993	ASME Section VIII, Div. 1 (1992A)	API 510	40 CFR 60, Subpart H and 40 CFR 61, Subpart FF
T-410-2	2005	ASME Section VIII, Div. 1 (2004)	API 510	40 CFR 60, Subpart H and 40 CFR 61, Subpart FF
D-750	1985	ASME Section VIII, Div. 1 (1983)	API 510	40 CFR 60, Subpart H
D-751	1985	ASME Section VIII, Div. 1 (1983)	API 510	40 CFR 60, Subpart H

1. Tanks T-130, T-135, 250 and T-255 were not listed above because these units are in the process of being closed.

V.A.2. Permitted and Prohibited Wastes

V.A.2.a. Permitted Waste

Subject to the terms of this permit, the Permittee is allowed to store in the tanks as described in Condition V.A.1.b, and the hazardous wastes identified in the Part A Permit Application.

V.A.2.b. Prohibited Waste

The Permittee is prohibited from storing hazardous waste that is not identified in the Part A Permit Application.

V.A.3. Secondary Containment

V.A.3.a. Duty to Comply with LAC 33:V.1907.B through F

The Permittee shall design, construct, operate, and maintain the secondary containment systems in accordance with LAC 33:V.1907.B-F, the Part II Permit Application, and Tables V-A-1 and V-A-2 of this Permit.

V.A.3.b. Prevention of Migration

V.A.3.b.(1). Secondary containment systems must be maintained and operated to prevent any migration of wastes or accumulated liquid out of the system to the soil, groundwater, or surface water at any time during the use of the tank system in accordance with LAC 33:V.1907.B.1.

V.A.3.b.(2). Ancillary equipment must be provided with secondary containment, except as excluded by LAC 33:V.1907.F.

V.A.3.b.(3). Secondary containment systems must be free of cracks or gaps and other surface defects that would allow liquid to migrate out of the containment system in accordance with LAC 33:V.1907.E.

V.A.3.b.(4). Secondary containment must possess an impervious coating capable of preventing lateral or vertical migration of accumulated liquid and wastes.

V.A.3.b.(5). Spilled or leaked waste and/or accumulated precipitation must be removed from the secondary containment system within twenty-four (24) hours in accordance with LAC 33:V.1907.C.4.

V.A.3.b.(6). If unable to remove spilled or leaked waste and/or accumulated precipitation within twenty-four (24) hours, the Permittee

must demonstrate to the Administrative Authority that more time is required and propose an alternate schedule for removal.

V.A.3.c. Requirements for Facilities Requesting a Variance

(RESERVED)

V.A.4. Operating Requirements

V.A.4.a. Duty to Comply with LAC 33:V.1909.A

The Permittee shall comply with LAC 33:V.1909.A. Hazardous wastes or treatment reagents must not be placed in a tank system if they could cause the tank, its ancillary equipment, or the containment system to rupture, leak, corrode, or otherwise fail.

V.A.4.b. Duty to Comply with LAC 33:V.1909.B

The Permittee shall comply with LAC 33:V.1909.B and Tables V-A-1 and V-A-2 of this permit. The Permittee must use appropriate controls and practices to prevent spills and overflows from tanks and containment systems.

V.A.4.c. Tank Covers

All hazardous waste storage tanks shall be covered and shall not be vented directly to the atmosphere if the tanks are used to store, or if a possibility exists that they may be used to store, volatile or malodorous waste.

V.A.4.d. Maintenance

The Permittee shall maintain the permitted tank systems according to the design code specified for each tank as listed in Table V-A-2 and not exceed the listed operating conditions.

V.A.5. Ignitable, Reactive, and Incompatible Wastes

The Permittee shall store ignitable, reactive, or incompatible wastes only in accordance with LAC 33:V.1517.B, 1917 and 1919.

V.A.6. Inspections

V.A.6.a. Inspection Schedule

The Permittee shall comply with LAC 33:V.1911.A through C by following the inspection schedule submitted in the Inspection Plan (see Attachment 1).

V.A.6.b. Daily Inspection

V.A.6.b.(1). At least once per day while the tank is operating in hazardous waste service, the Permittee shall inspect the following:

V.A.6.b.(1).(a). Above ground portions of the tank system, including the tank, ancillary piping, valves, and vent controls, to detect corrosion, cracks or releases of waste.

V.A.6.b.(1).(b). Data gathered from monitoring and leak detection equipment.

V.A.6.b.(1).(c). The construction materials and area immediately surrounding the externally accessible portion of the tank system and ancillary equipment, e.g. secondary containment system, to detect erosion, cracks and signs of hazardous waste releases.

V.A.6.b.(2). All deficiencies noted during daily inspections must be recorded and remedied in a timely manner.

V.A.6.c. External Inspection

At a minimum, external inspection of each tank covered by this permit shall be performed as often as required by the API designated inspection standard in Table V-A-2. The required frequency of inspection with reference to the applicable section of the standard shall be kept on site and available for review by the Administrative Authority upon request. The inspection shall be performed by a person meeting the minimum qualifications required under the inspection standard in Appendix B of API Standard 510. The inspection checklist shall be comparable to that in Appendix C of API Standard 510.

If the result of such an inspection reveals that the tank is unfit for continued service, the Permittee shall immediately stop the flow of hazardous waste into the tank and comply with LAC 33:V.1913. The certification required by LAC 33:V.1913.F shall be obtained before the tank is put back into service.

V.A.6.d. Internal Inspection

Internal inspection of each tank covered by this permit shall be performed as often as required by the inspection standard in Table V-A-2. The required frequency of inspection with reference to the applicable section of the standard shall be kept on site and available for review by the Administrative Authority upon request. The inspection shall be performed by a person

meeting the minimum qualifications required under the inspection standard in Table V-A-2. The inspection checklist shall be comparable to that in Appendix C of API Standard 510.

If the result of such an inspection reveals that the tank is unfit for continued service, the Permittee shall immediately stop the flow of hazardous waste into the tank and comply with LAC 33:V.1913. The certification required by LAC 33:V.1913.F shall be obtained before the tank is put back into service.

V.A.6.e. Thickness Testing

V.A.6.e.(1). Thickness testing of each metallic tank listed in Tables V-A-1 and V-A-2 of this permit shall be performed biennially.

V.A.6.e.(2). Tank thickness measurements shall be taken on the tank top and shell and shall be taken on each tank quadrant. Tank thickness readings shall be taken on the same place during each testing event in order to form a comparison of readings for corrosion rate determination.

V.A.6.e.(3). Thickness testing of the tank bottom shall be performed as often as the internal inspection, or more often if required by the inspection standard specified in Table V-A-2. The required frequency of inspection, with reference to the applicable section of the inspection standard, shall be kept on-site and made available to the Administrative Authority upon request.

V.A.6.e.(4). Tank thickness readings shall also be taken at any spot where visual corrosion or compromised integrity is evident.

V.A.6.e.(5). When any tank shell thickness measurement at a single point is less than that required in Table V-A-1, the Permittee shall immediately comply with either Condition V.A.6.e.(5).(a) or (b) below. Condition V.A.6.e.(5).(b) shall not be used for any tank where the shell thickness measurement is less than 0.100 inches.

V.A.6.e.(5).(a). The tank shall be deemed unfit for use and the Permittee shall immediately stop the flow of hazardous waste into the tank and comply with LAC 33:V.1913. The tank shall be repaired or replaced and the certification required by LAC 33:V.1913.F shall be obtained before the tank is put back into service.

V.A.6.e.(5).(b). An engineering evaluation shall be performed, conforming to the appropriate standard or standards, as allowed by the design or inspection standard in Table V-A-2. If the

evaluation determines that the tank is unfit for service, the Permittee shall comply with Condition V.A.6.e.(5).(a) immediately. The evaluation must be submitted to the Administrative Authority for approval within ninety (90) days of the initial measurement.

V.A.6.e.(6). Tank thickness measurements shall not be averaged, unless allowed under the tank inspection standard in Table V-A-2. The Permittee shall submit a Class 2 permit modification request in accordance with LAC 33:V.322.G.4 (Modification of Tank Management Practice) to allow for the averaging of thickness measurements unless averaging of tank thickness for a particular tank is specified in Tables V-A-1 and V-A-2.

V.A.6.f. Overfill Controls

Overfill controls shall be tested to ensure that they are in working order according to the schedule proposed in the Inspection Plan (see Attachment 1).

V.A.6.g. Fiberglass Tanks

(RESERVED)

V.A.7. Response to Leaks and Spills

V.A.7.a. Duty to Comply with LAC 33:V.1913.A through E

In the event of a leak or spill from a tank system, secondary containment system, or if a system becomes unfit for use, the Permittee shall comply with LAC 33:V.1913.A through E.

V.A.7.b. Leaks and Spills

V.A.7.b.(1). Upon discovering a leak or spill, the Permittee must immediately stop the flow of hazardous waste into the tank system or secondary containment system and inspect the system to determine the cause of the release.

V.A.7.b.(2). Within twenty-four (24) hours of detecting a leak from the tank system, or in as timely a manner as is practical if the Permittee demonstrates that it is not possible to remove the waste within twenty-four (24) hours, the Permittee must remove as much waste as necessary to prevent further release from the tank or secondary containment system and to allow inspection and repair of the tank system in accordance with LAC 33:V.1913.B.1.

V.A.7.b.(3). Any spilled material or material trapped in sumps that is a hazardous waste or that will be disposed of as a hazardous waste must be cleaned up in a timely manner, as required by LAC 33:V.1505.C.3.

V.A.7.b.(3).(a). If the collected material is discharged through a point source to United States waters or to a Publicly Owned Treatment Works, it is subject to the requirements of the Clean Water Act.

V.A.7.b.(3).(b). If the collected material is released to the environment, it may be subject to reporting under applicable requirements of LAC 33:V.1505, LAC 33:I.Chapter 39, and 40 CFR Part 302.

V.A.7.b.(4). When a leak or spill occurs, the Permittee shall remove and properly dispose of any visible contamination of the soil or surface water in accordance with LAC 33:V.1913.C.2.

V.A.7.b.(5). A tank system from which a leak or spill has occurred must be closed in accordance with the approved Closure Plan and LAC 33:V.1915, unless the requirements of LAC 33:V.1913.E.2 and 3 are satisfied.

V.A.7.b.(5).(a). For a release caused by a spill that has not damaged the integrity of the system, the Permittee shall remove the released waste and make any necessary repairs to fully restore the integrity of the system before returning the tank system to service in accordance with LAC 33:V.1913.E.2.

V.A.7.b.(5).(b). For a release caused by a leak from the primary tank system to the secondary containment system, the Permittee shall repair the primary system prior to returning the tank to service in accordance with LAC 33:V.1913.E.3.

V.A.7.b.(6). If the Permittee replaces a component of the tank system to eliminate a leak, that component must satisfy the requirements for new tank systems or components in LAC 33:V.1905 and 1907.

V.A.7.b.(7). All leaks and spills shall be documented in the daily inspection log.

V.A.7.c. Major Repairs

V.A.7.c.(1). The Permittee shall comply with LAC 33:V.1913.F when performing major repairs to a tank system in accordance with LAC 33:V.1913.E.

V.A.7.c.(2). Major repairs shall include, but not be limited to, installation of an internal liner, repair of a ruptured tank, repair of a ruptured secondary containment area, and removal of a tank from its foundation for any reason.

V.A.7.c.(3). The Permittee shall conform to the appropriate portion of the most recent inspection code (listed in Table V-A-2 of this permit) for maintenance, inspection, re-rating, repair, and alteration of all tanks.

V.A.7.c.(4). The tank shall not be returned to service unless the Permittee has obtained a certification by an independent professional engineer licensed in the State of Louisiana that the system is capable of handling hazardous waste without release for the intended life of the system. The certification of repairs shall include an inspection in accordance with the requirements of any applicable codes, such as API 510. In accordance with LAC 33:V.1913.F, the certification shall be submitted to the Administrative Authority within seven (7) days of returning the tank system to use.

V.A.8. Air Emission Control Equipment Standards

The Permittee shall comply with the applicable requirements for air emission control equipment for hazardous waste tanks in LAC 33:V.1747-1799 and as specified in Table V-A-2 and Condition VII.B of this permit.

V.A.9. Recordkeeping and Reporting

V.A.9.a. New Tanks

In the event any new tank systems are installed, the Permittee shall obtain, and keep on file at the facility, the written statements by those persons required to certify the design and installation of new tank systems, in accordance with LAC 33:V.1905.G.

V.A.9.b. Written Assessment

The Permittee shall keep on file at the facility, written assessments of the tank systems' integrity. The assessments shall be updated at the time of submittal of a Permit Renewal Application and/or at any other time deemed necessary by the Administrative Authority (i.e., permit modifications, tank replacements, tank repairs, etc.).

V.A.9.c. Inspections

V.A.9.c.(1). The Permittee shall document in the operating record for the facility inspection of those items in Condition V.A.6.a and b of this permit.

V.A.9.c.(1).(a). The daily log sheets shall include all monitored parameters for the prevention of spills and overflows, including temperature, pressures, and levels.

V.A.9.c.(1).(b). The Permittee shall note all deficiencies discovered during the inspection in the inspection log.

V.A.9.c.(1).(c). Corrective action taken in response to deficiencies must be included as part of the operating record for the facility.

V.A.9.c.(2). The Permittee shall document in the operating record all tests and inspections of overfilling controls.

V.A.9.c.(3). The Permittee shall keep on file at the facility the results of the internal and external inspections required by Condition V.A.6.c and d of this permit. The Permittee shall note all deficiencies discovered during the inspection in the inspection log. Corrective action taken in response to deficiencies must be included as part of the operating record for the facility.

V.A.9.c.(4). The Permittee shall keep on file at the facility all information related to tank thickness testing required under Condition V.A.6.e of this permit.

V.A.9.c.(4).(a). This information shall include at a minimum the date(s) of assessment, the location where measurement readings are taken, the raw measurement data, comparison of actual reading to minimum thickness requirements, the corrosion rate, and calculation of remaining tank life.

V.A.9.c.(4).(b). If an engineering evaluation is performed in accordance with Condition V.A.6.e.(5).(b), the results of such an evaluation shall be kept in the operating record. The engineering evaluation must include, at minimum, details on how the evaluation was performed, references to applicable tank codes, raw data, calculations performed, and an explanation of why the tank is or is not fit for continued service.

V.A.9.c.(4).(c). Any tank thickness measurements that are averaged under Condition V.A.6.e.(6) must be supported by documentation with references to the applicable tank codes. The documentation shall include all raw measurement data, calculations, and results of averaging. This information shall be kept as a part of the operating record for the facility.

V.A.9.c.(5). The Permittee shall keep on file at the facility the records of repairs required under Condition V.A.7.c of this permit.

V.A.9.d. Releases

V.A.9.d.(1). The Permittee shall keep on file at the facility notification reports submitted under LAC 33:V.1913.D.

V.A.9.d.(2). Within twenty-four (24) hours of detecting a reportable leak or spill from a tank system or secondary containment system to the environment, the Permittee shall report the leak in accordance with either Condition II.E.16 (Emergency) or Condition II.E.17 (Non-Emergency).

V.A.9.d.(3). As required by LAC 33:V.1913.D.3, within thirty (30) days of detecting a reportable release to the environment from a tank system or secondary containment system, the Permittee shall report the following information to the Administrative Authority's Single Point of Contact (SPOC):

V.A.9.d.(3).(a). Likely route of migration of the release,

V.A.9.d.(3).(b). Characteristics of the surrounding soil, including soil composition, geology, hydrogeology, and climate,

V.A.9.d.(3).(c). Results of any monitoring or sampling conducted in connection with the release (if available). If the Permittee finds it will be impossible to meet this time schedule, the Permittee must provide the Administrative Authority with a schedule of when the results will be available. This schedule must be provided before the required thirty (30) day submittal period expires,

V.A.9.d.(3).(d). Proximity of downgradient drinking water, surface water, and populated areas, and

V.A.9.d.(3).(e). A description of response actions taken or planned.

V.A.9.e. Repairs

The Permittee shall keep on file at the facility all certifications required by Condition V.A.7.c.

V.A.10. Closure and Post-Closure Care

V.A.10.a. Duty to Comply with LAC 33:V.1915.A

The Permittee shall comply with LAC 33:V.1915.A by following the procedures specified in the latest approved Closure Plans, see Attachment 1.

V.A.10.b. Duty to Comply with LAC 33:V.1915.B

If the Permittee demonstrates that not all contaminated soils can be practicably removed or decontaminated in accordance with Condition V.A.10.a of this permit, the Permittee shall comply with LAC 33:V.1915.B.

V.A.10.c. Post-Closure

The Permittee shall attempt to clean close all tank systems. If the surface and subsurface soils below and adjacent to the tank system cannot be clean closed and the Permittee has not demonstrated through a risk assessment approved by the Administrative Authority that closure with the remaining contaminant levels is protective of human health and the environment, the Permittee shall present a post-closure plan to the Administrative Authority for approval. If any waste residue or contaminated media are left in place at final closure, the Permittee must comply with all post-closure requirements contained in LAC 33:V.3519 through 3527, including maintenance and monitoring throughout the post-closure care period.

V.A.11. Compliance Schedule

The Permittee has implemented the approved closure plan for the permitted Environmental Operations Plant hazardous waste tanks: T-130; T-135; and T-255; therefore the tanks no longer actively manage hazardous waste. However, the Permittee has not yet provided a closure certification report to the Administrative Authority documenting clean closure of the tanks. Therefore, the tanks will remain as permitted hazardous waste units in this permit with a maximum permitted capacity of zero (0) gallons until such time that clean closure is verified by the Administrative Authority.

V.B. CONTAINERS AND CONTAINER STORAGE AREAS (CSAs)

The permit conditions as set forth under this section shall apply where applicable, to the permitted container storage facilities as identified in Table V-B.

V.B.1. Conditions and Operations

V.B.1.a. Conditions of Containers

V.B.1.a.(1). The Permittee shall be in compliance with all applicable conditions set forth in LAC 33:V.Chapter 21.

V.B.1.a.(2). The Permittee shall manage the containers holding hazardous waste in accordance with LAC 33:V.2103.

V.B.1.a.(3). The Permittee shall maintain the integrity of all containers in accordance with LAC 33:V.2103.

V.B.1.b. Management of Containers

The Permittee shall operate and maintain the container storage units in accordance with LAC 33:V.2101 and the specification and design criteria submitted in the Part B Permit Application.

V.B.1.b.(1). The Permittee shall manage containers in accordance with LAC 33:V.2107.

V.B.1.b.(2). Hazardous waste containers shall be managed in accordance with LAC 33:V.2105. Hazardous wastes being transported offsite must be packaged and labeled in accordance with DOT standards listed in 49 CFR 173 and 178 as required by LAC 33:V.1109 and LAC 33:V.1759.F.

V.B.1.b.(3). If any hazardous waste is emptied from a container, the residue remaining in the container is not considered hazardous waste if the container is "empty" as defined by LAC 33:V.109.

V.B.1.b.(4). Drums or containers holding thirty (30) gallons or more, must be stored on pallets not more than two (2) containers high with no more than four (4) containers per tier on the pallet.

V.B.1.b.(5). Five (5) gallon containers may be stored pallets three (3) containers high with sixteen (16) containers per tier on each pallet and with a maximum of three (3) pallets per stack.

V.B.1.b.(6). All containers must be placed in a manner allowing waste identification and warning labels to be easily read from the access aisles.

V.B.1.b.(7). All pallets utilized in the storage of hazardous waste containers, irrespective of volume, shall be placed in rows with a minimum of two (2) feet of aisle space between rows, or the width necessary to get emergency equipment to any area of the aisle, whichever is greater.

V.B.1.b.(8). No containers or pallets may be stored directly over drain sumps.

V.B.1.c. Permitted Waste Storage

V.B.1.c.(1). Prior to storage of hazardous waste in the CSAs, the Permittee must perform a comprehensive chemical and physical analysis of a representative sample of the waste in accordance with LAC 33:V.1519.A.

V.B.1.c.(2). Subject to the terms of this permit, the Permittee is allowed to store containers containing hazardous wastes identified in the Part A hazardous waste permit application in excess of ninety (90) days at the CSAs indentified in Table V-B of this permit.

V.B.1.c.(3). At each CSA included in Table V-B, the Permittee is allowed to store a maximum volume of hazardous waste not to exceed the maximum permitted storage capacity specified in Table V-B of this permit.

V.B.1.d. Prohibited Waste Storage

The Permittee is prohibited from storing hazardous waste not listed in the Part A hazardous waste permit application. Non-hazardous wastes and other containerized materials shall be managed in accordance with the terms and conditions of this permit when stored in the CSAs. The Permittee is prohibited from the receipt of offsite generated hazardous waste for storage at the CSAs.

V.B.1.e. Containment Systems

V.B.1.e.(1). The Permittee shall design and operate secondary containment systems in compliance with LAC 33:V.2111.A and B. The Permittee shall manage any collected material as required by LAC 33:V.2111.B.6. Spilled or leaked waste and accumulated precipitation shall be managed in a timely manner in accordance with LAC 33:V.2111.B.5.

V.B.1.e.(2). The Permittee shall always maintain enough secondary containment capacity to contain at least ten percent (10%) of the total volume of containers or the volume of the largest container, whichever is greater in accordance with LAC 33:V.2111.B.3. Containers that do not contain free liquids (per the Paint Filter Liquids Test) do not need to be considered in this determination.

V.B.1.f. Requirements for Ignitable, Reactive and Incompatible Wastes

The Permittee must place and store incompatible, ignitable, and reactive wastes only in accordance with LAC 33:V.1517, 2113, and 2115.

V.B.1.g. Inspection Schedules and Procedures

The Permittee must inspect all CSAs and all containers stored within the CSAs a minimum of once every seven (7) calendar days for leaks, deterioration of containers, and releases to or from the secondary containment systems in accordance with LAC 33:V.2109 and LAC 33:V.1509. Results of such inspections must be placed in the operating record in accordance with LAC 33:V.1529.B.8.

V.B.1.h. Leaks and Spills

V.B.1.h.(1). The Permittee shall manage spilled or leaked waste and accumulated precipitation in a timely manner in accordance with LAC 33:V.2111.B.5 and B.6.

V.B.1.h.(2). Within twenty-four (24) hours of detecting a reportable leak or reportable spill from any container(s), the Permittee shall report the leak or spill in accordance with either Condition II.E.16 (Emergency Unauthorized Discharge) or Condition II.E.17 (Non-Emergency Unauthorized Discharge) of this permit.

V.B.1.h.(3). The Permittee must manage any collected material as required by LAC 33:V.2111.B.6. Stormwater shall be contained until analysis establishes that it meets permit limitation criteria for discharge through the NPDES treatment system, or other authorized disposal methods.

V.B.1.i. Recordkeeping

The Permittee shall place in the operating record the results of all waste analyses, trial tests, and any other documentation demonstrating compliance with the requirements of LAC 33:V.1517 and 2115.D.

V.B.1.j. Closure

V.B.1.j.(1). At closure, the Permittee shall clean close all CSAs by adhering to the procedures detailed in the approved closure plan referenced in Attachment 1 of this permit and as required by LAC 33:V.2117 and Chapter 35, Closure Requirements.

V.B.1.j.(2). At closure the Permittee must remove all hazardous waste, residues, and containers from the CSAs. All contaminated soils must also be removed.

V.B.1.j.(3). In the event the Permittee fails to achieve the clean closure performance standard (as specified in the approved closure plan) for a specific CSA, the Permittee shall submit a post-closure plan within ninety (90) days from the date that either the Permittee or the Administrative Authority determines the CSA must be closed as a landfill. The post-closure plan must meet the requirements of LAC 33:V.3523.B.

Table V-B
Container Storage Areas (CSAs)

Unit No. or Name	Dimensions (Feet)	Total Permitted Capacity	Required Containment Capacity
A	~100'X65' (6,500 ft^2)	600,000 pounds	None[1]
B	~90'X~52' (8,400 ft^2)	600,000 pounds	None[2]
C	~100'X~65' (6,000 ft^2)	250,000 pounds	None[2]
D-1	15.7'X55' (~870 ft^2)	12,000 gal[3]	6,000 gal
D-2	71.5'X31.5' (~2,250 ft^2)	12,000 gal[3]	6,000 gal
E	~129.5'X~170' trapezoidal (~28,000 ft^2)	210,000 gal	195,000[4] gal

[1] Sump #265 (SU-265) is used for rainwater runoff that may run off the surface. The storage area meets LAC 33:V.2111.C.
[2] No secondary containment is required for storage areas with dry solids in the containers that are covered from the rain.
[3] Maximum storage capacity for D-1 and D-2 combined is 24,000 gallons.
[4] Includes rainwater run-on per LAC 33:V.2111.B.3 and 4 assuming 10 inches of rain in a 24-hour period with use of the contained storage area and Sump 265.

V.C. GENERAL REQUIREMETS FOR THE THERMAL TREATMENT UNITS (TTUs)

V.C.1. Permitted and Prohibited Wastes

V.C.1.a. The Permittee may only burn hazardous wastes specified in the Waste Analysis Plan and carrying the hazardous waste codes provided in the Part A permit application.

V.C.1.b. The Permittee is prohibited from burning the following wastes in the TTUs:

V.C.1.b.(1). Dioxin-containing wastes carrying the following wastes codes: F020, F021, F023, F026, F027, and F028.

V.C.1.b.(2). Polychlorinated biphenyl (PCB) waste as defined in LAC 33:V.4901.

V.C.1.b.(3). Source material, special nuclear material, mixed waste, or naturally occurring radioactive materials (NORM) that is not exempt pursuant to LAC 33:XV.

V.C.1.b.(4). Explosive material, as defined by the Department of Transportation in 49 CFR Part 173.

V.C.1.b.(5). Municipal waste.

V.C.1.b.(6). Containerized gases.

V.C.1.b.(7). Medical/Infectious wastes as defined in 40 CFR 60.51.c.

V.C.1.b.(8). Metal bearing wastes listed in LAC 33:V.Chapter 22, Table 12, except as described in LAC 33:V.2207.C.

V.C.1.b.(9). Waste displaying the characteristic of reactivity as defined in LAC 33:V.4903.D.

V.C.1.b.(10). Only the Solvents/EDC Incinerator (F-700) is permitted to burn wastes controlled under the Toxic Substances Control Act (TSCA). All other TTUs are prohibited from burning TSCA Wastes.

V.C.1.c. The Permittee shall obtain a permit modification, as required under LAC 33:V.321, prior to burning any wastes not currently authorized under this permit.

V.C.2. Inspections

V.C.2.a. Requirements

V.C.2.a.(1). The Permittee shall inspect the TTUs, air pollution control equipment, and instrumentation in accordance with Table V.C-1 of this permit.

V.C.2.a.(2). The TTUs and associated equipment (pumps, valves, pipes, fuel storage tanks, and other ancillary equipment) will be subject to a daily thorough, visual inspection, when they contain hazardous waste. The purpose of these inspections will be to identify leaks, spills, fugitive emissions, and signs of tampering.

V.C.2.a.(3). The automatic waste feed cut off system and associated alarms must be tested at least monthly when hazardous waste is burned to verify operability, unless the applicant demonstrates to the Administrative Authority that weekly inspections will unduly restrict or upset operations and that less frequent inspections are adequate. Support for this demonstration shall be included in the operational record. At a minimum, operational testing of the automatic waste feed cut off system must be conducted at least monthly, (LAC 33:V.3005 F.3- F.4 and 3119).

V.C.2.b. Records

V.C.2.b.(1). Written inspection records shall be part of the operating record for this permit and are hence subject to LAC 33:V.1529 requirements. At a minimum, the record shall include the following information: (1) the date and time of the inspection, (2) inspector's name, (3) any inspection observations, and (4) date and nature of corrective action. The inspection record shall be completed in accordance with LAC 33:V.1509 and shall be available at all times to the Administrative Authority.

Electronic records may be maintained, in lieu of paper copies.

V.C.2.b.(2). A written record of the automatic waste feed cut-off system tests shall be part of the operating record for this permit and shall be available at all times to the Administrative Authority.

Electronic records may be maintained, in lieu of paper copies.

V.C.3. Monitoring and Calibration

V.C.3.a. Requirements

V.C.3.a.(1). The Permittee shall maintain, calibrate, and operate continuous monitors that monitor and record the operating conditions specified in Conditions V.C and V.D of this permit. The continuous monitoring

parameters shall be as specified in the Group A, B, and C Operating Parameter Limit Tables for each permitted TTU included in this permit. (LAC 33:V.3005.F and 3119).

V.C.3.a.(2). The Administrative Authority may request data be submitted in any format or units that facilitates the completion of air modeling, risk assessment, or compliance procedures.

V.C.3.a.(3). Monitoring samples and measurements shall be representative of the monitored activity. The method used to obtain a representative sample of the waste to be analyzed shall be the appropriate method specified in LAC 33:V.Chapter 49.Appendix D or an equivalent method approved by the Administrative Authority.

Other sampling and analytical methods shall be those specified in *Test Methods for Evaluating Solid Waste: Physical/Chemical Methods*, SW-846, as revised; *Standard Methods for the Examination of Water and Wastewater*, current edition, or equivalent methods.

V.C.3.a.(4). The Permittee must calibrate the equipment specified in Tables V.D.1-3, V.D.2-3, V.D.3-3, and V.D.4-3 according to the manufacturer's specifications. Calibration procedures shall be included in the operating record of the facility and available at all times for review by the Administrative Authority.

V.C.3.a.(5). Hazardous waste may continue to be introduced into the TTUs during daily continuous emission monitoring system (CEMS) calibration check periods. The CEMS shall be maintained according to the following schedule: (1) at least daily, a calibration check of the instrument; (2) at least daily, a system audit; (3) at least quarterly, a calibration error test; and (4) at least annually, a performance specification test. The procedures for CEMS maintenance are outlined in 40 CFR 266 Appendix IX Condition 2.0, "Performance Specifications for Continuous Emission Monitoring Systems."

V.C.3.b. Records

In the operating record, the Permittee shall record and maintain in accordance with LAC 33:V.1529 all monitoring data compiled to satisfy the permit requirements. Minimum monitoring requirements are summarized in LAC 33:V.3005.F. In accordance with LAC 33:V.3005.F.2, all continuous monitors shall record data in units corresponding to the permit limit unless otherwise specified in the permit.

Electronic records may be maintained, in lieu of paper copies.

V.C.4. Performance Standards

V.C.4.a. Requirements

The Permittee shall comply with the performance standards specified in Conditions V.D.1.a, V.D.2.a, V.D.3.a, and V.D.4.a of this permit when hazardous waste is burned in the TTUs (LAC 33:V.3009-3015 and 3109-3111).

V.C.4.b. Records

The Permittee shall record in the facility operating record all occasions on which waste is fed to the TTUs and the operating limits specified in this permit are exceeded.

Electronic records may be maintained, in lieu of paper copies.

V.C.5. Automatic Waste Feed Cut Off

V.C.5.a. Requirements

V.C.5.a.(1). The Permittee shall operate the automatic waste feed cut off systems to terminate feed to the TTU when monitored operating conditions deviate from the operating parameter limits specified in Tables V.D.1-1, V.D.2-1, V.D.3-1, and V.D.4-1 of this permit.

V.C.5.a.(2). When hazardous waste is present in the combustion chamber of a TTU, exhaust gases must be vented to the TTU's air pollution control systems. The air pollution control systems must be operated in accordance with all applicable permit requirements.

V.C.5.a.(3). Operating parameters for which permit limits are established must continue to be monitored following the cut off, and the hazardous waste feed shall not be restarted until the levels of those parameters that caused the automatic waste feed cut off are restored to permit limits. All other parameters must also be within permit limits.

V.C.5.a.(4). In the event of a malfunction of the automatic waste feed cut off system, the Permittee shall immediately cut off and/or lock out the waste feed to the TTUs.

V.C.5.b. Records

V.C.5.b.(1). The Permittee shall record in the facility operating record the date and time of all automatic waste feed cut off events. The records shall also include the known or suspected cause of the automatic waste feed cut off, the triggering parameters, root cause, the corrective actions taken, the duration of the event, and the date and time of restarting waste feed following the automatic waste feed cut off.

Electronic records may be maintained, in lieu of paper copies.

V.C.5.b.(2). The operating record shall be maintained in an organized manner for a period of not less than 3 years and be available at all times for inspection by the Administrative Authority (LAC 33:V.3005.H and 3119.D).

V.C.6. Reports

The Permittee shall report activation of the automatic waste feed cut off systems in the annual report described in Condition III.N.2 of this permit. The report shall include summaries of the date, cause, and remedial action for each waste feed cut off activation. The Permittee shall report in writing to the Administrative Authority if there are more than fifty (50) permit required waste feed cut offs per month for a particular TTU. This report shall include date, cause and remedial actions taken and must be submitted within thirty (30) days of the end of the month in which the fifty (50) or more permit required waste feed cut offs occurred.

V.C.7. Regulation of Residues

The Permittee shall regulate all hazardous waste combustion residues in accordance with LAC 33:V.3025.

TABLE V.C-1

COMBUSTION UNIT INSPECTIONS

Equipment/Instrument	Inspection Elements	Inspection Frequency
Burner system	Leaks in manifold	Daily
Waste feed system	Atomizing fluid pressure transducer	Daily
	Waste feed pressure transducer	Daily
	Waste feed flowmeter	Daily
Waste tank system	Tank integrity	Daily
	Level controls	Monthly
	Overflow alarms and controls	Monthly
	Secondary containment	Daily
Combustion Units (i.e.: BIFs, Incinerator and rotary kiln)	Fugitive emissions	Daily
	Refractory	Annually
Continuous process monitors	Out-of-tolerance operational data	Daily
Automatic waste feed cut off system	Operability	Monthly
Electrostatic Precipitator for rotary kiln	Condition of collection plates	Annually
	Condition of Electrical Components	Annually
	Operation of rappers	Annually
Absorber and Scrubber Systems for BIFs and Incinerator	Condition of packing or trays	Annually
	Operation of spray nozzles and recirculation system	Annually
	Condition of mist eliminators	Annually

V.D. SPECIFIC OPERATING CONDITIONS FOR THE TTUs

V.D.1. Operating Conditions for the Chlorinated Methanes Boiler (R-750)

The R-750 Boiler shall be subject to the following provisions and operating conditions until such time the Permittee conducts a Comprehensive Performance Test (CPT) in accordance with the Hazardous Waste Combustors Maximum Achievable Control Technology (HWC-MACT) timelines and requirements. After the Administrative Authority issues a Finding of Compliance on the results of the CPT, this permit will be modified and the applicable provisions and operating conditions pertaining to the normal operation of the R-750 Boiler will be transferred to the Permittee's Title V Air Permit.

V.D.1.a. Performance Standards Requirements

V.D.1.a.(1). The R-750 Boiler shall achieve a Destruction and Removal Efficiency (DRE) of 99.99 percent for each principal organic hazardous constituent (POHC). The DRE shall be determined by using the method specified in LAC 33:V.3009.A. The POHCs are:

- Carbon tetrachloride
- Chlorobenzene

V.D.1.a.(2). The Permittee shall control emissions of hydrogen chloride (HCl) such that the rate of emissions from the stack is no greater than 2.1 pounds per hour.

V.D.1.a.(3). The Permittee shall control emissions of chlorine (Cl_2) such that the rate of emissions from the stack is no greater than 0.25 pounds per hour.

V.D.1.a.(4). The emissions of particulate matter shall not exceed 0.08 grains per dry standard cubic foot of stack gas, corrected to 7 percent oxygen by volume, in accordance with the formulas specified in LAC 33:V.3011.

V.D.1.a.(5). The emissions of carbon monoxide, corrected to 7 percent oxygen, shall not exceed 100 parts per million by volume on an hourly rolling average in accordance with LAC 33:V.3009.B.

V.D.1.b. Process Operating Conditions

V.D.1.b.(1). Group A Parameter Limits

The Permittee shall operate the R-750 Boiler with a functional automatic waste feed cut off system which terminates waste feeds to the boiler when operating and process conditions deviate from the operating parameter limits prescribed in Table V.D.1-1 and/or the following additional requirements for which no operating parameter limits are specified:

V.D.1.b.(1).(a). Whenever hazardous waste is in the unit, the boiler must be kept totally sealed to protect against the escape of fugitive emissions (LAC 33:V.3005.E.7).

V.D.1.b.(1).(b). The Permittee shall immediately stop the flow of hazardous waste into the boiler should sample flow to the CEMS cease (other than normal calibration periods).

V.D.1.b.(1).(c). The Permittee shall analyze values form the CEMS at a minimum of every fifteen (15) seconds. The Permittee must record these values every sixty (60) seconds in order to demonstrate compliance with monitoring requirements.

V.D.1.b.(1).(d). The Permittee must operate all Continuous Monitoring System (CMS) components consistent with the manufacturer's specifications.

V.D.1.b.(1).(e). The Permittee must operate all Continuous Monitoring System (CMS) components consistent with the manufacturer's specifications.

V.D.1.b.(2). Group B and C Parameter Limits

Although the automatic waste feed cut off systems do not have set points for the Group B and Group C parameter limits, the Permittee shall operate the boiler without exceeding the Group B parameter limits in Table V.D.1-2. In addition, O_2 shall be monitored continuously in accordance with CEMS regulations. O_2 level is provided as a correction factor, and as such no limit for O_2 is provided under this condition.

Table V.D.1-1
Group A Operating Parameter Limits
Chlorinated Methanes Boiler (R-750)
Automatic Waste Feed Cut Offs

Control Parameter	Final Operating Limits Automatic Waste Feed Cut Off Point
Maximum total hazardous waste feed rate	1,215,000 grams/hr, hourly-rolling average
Minimum combustion zone temperature	1147 °C, hourly-rolling average
Maximum combustion zone temperature	1466 °C, hourly-rolling average
Maximum stack gas carbon monoxide	100 ppmv, corrected to 7% oxygen on a dry gas basis, hourly-rolling average
Maximum combustion air flow rate	2,793 scfm, hourly-rolling average
Minimum HCl absorber (C-750) blowdown rate	49,470 pounds per hour, hourly-rolling average
Minimum HCl absorber (C-750) L/G ratio	1.6, hourly-rolling average
Minimum chlorine (C-751) scrubber blowdown rate	32,760 pounds per hour, hourly-rolling average
Minimum chlorine (C-751) scrubber L/G ratio	1.17, hourly-rolling average
Minimum chlorine scrubber (C-751) effluent pH	8.6, hourly-rolling average

Table V.D.1-2
Group B and C Operating Parameter Limits
Chlorinated Methanes Boiler (R-750)

Control Parameter	Final Operating Limits
Minimum atomizing fluid pressure	40 psig, 1-minute average
Maximum ash feed rate	4,123 grams/hr, hourly-rolling average
Maximum emission rate limit for total Chromium (Tier III)	0.58 g/hr, hourly-rolling average
Maximum total chlorine and HCl feed rate (Tier III)	1,092,000 grams/hr, hourly-rolling average
Maximum Metals Feed Rate Total Feed Streams	
Maximum feed rate of Antimony (Adjusted Tier I)	198.7 g/hr, hourly-rolling average
*Maximum feed rate of Arsenic (Adjusted Tier I)	0.26 g/hr, hourly-rolling average
Maximum feed rate of Barium (Adjusted Tier I)	106.9 g/hr, hourly-rolling average
*Maximum feed rate of Beryllium (Adjusted Tier I)	0.17 g/hr, hourly-rolling average
*Maximum feed rate of Cadmium (Adjusted Tier I)	0.80 g/hr, hourly-rolling average
*Maximum feed rate of total Chromium (Tier III)	7.69 g/hr, hourly-rolling average
Maximum feed rate of Lead (Adjusted Tier I)	50.0 g/hr, hourly-rolling average
Maximum feed rate of Mercury (Adjusted Tier I)	32.0 g/hr, hourly-rolling average
Maximum feed rate of Silver (Adjusted Tier I)	166.7 g/hr, hourly-rolling average
Maximum feed rate of Thallium (Adjusted Tier I)	152.3 g/hr, hourly-rolling average

* The feed rates of arsenic, beryllium, cadmium, and total chromium are limited to levels such that the sum of the rations of the actual feed rate to the feed rate limits specified in V.D.1.b.(2).(c) shall not exceed 1.0, as provided by the following equation.

$$\sum_{i=1}^{n} AFR_{(i)}/FRL_{(i)} \leq 1.0$$

$AFR_{(i)}$ = **Actual Feed Rate (AFR)**
The actual feed rate of carcinogenic metals (i) introduced into the combustion chamber from all TTU feedstreams.

n = Number of Carcinogenic Metals.

$FRL_{(i)}$ = **Feed Rate Limit (FRL)**
The regulatory feed limit of carcinogenic metals (i) listed in Table V.D.1-2

TABLE V.D.1-3
CHLORINATED METHANES BOILER (R-750)
INSTRUMENTATION TO BE CALIBRATED ACCORDING TO MANUFACTURER'S SPECIFICATIONS

Control Parameter	Instrument Description	DCS Tag #	Calibration frequency
D-750 Vent Flowrate	Flow Meter	AI-119	Annual
D-751 Vent Flowrate	Flow Meter	AI-112	Annual
Cellulose Vent Flowrate	Flow Meter	AI-114	Annual
Vinyl 2 Vent Flowrate	Flow Meter	DXE-FT48406	Annual
Hazardous Waste Feedrate	Flow Meter	AI-119	Annual
Combustion Chamber Temperature	Thermocouple	AI-154/AI-164	Annual
Stack Gas Flowrate	Flow Meter	TBD[1]	N/A
Stack Gas Oxygen	Paramagnetic	AI-244/AI-254	Annual – RATA Quarterly - ACA
Stack Gas Carbon Monoxide	Infrared Analyzer	AI-243/AI-3124	Annual – RATA Quarterly - ACA
Atomizing Steam Pressure	Pressure Transmitter	AI-148	Annual
Steam Production Rate	TBD[1]	TBD[1]	N/A
C-750 HCl Absorber Pressure Drop	Differential Pressure Transmitter	AI-229	Annual
C-750 HCl Absorber L/G Ratio	Control System Calculation	TBD[1]	N/A
C-750 HCl Absorber Makeup Flowrate (Part of L)	Flow Meter	AI-237	Annual
C-751 Chlorine Scrubber Pressure Drop	Differential Pressure Transmitter	AI-213	Annual
C-751 Chlorine Scrubber Caustic Flowrate (Part of L)	Flow Meter	AI-207	Annual
C-751 Chlorine Scrubber Makeup Water Flowrate (Part of L)	Flow Meter	AI-217	Annual
C-751 Chlorine Scrubber Flowrate (L)	Control System Calculation	TBD[1]	N/A
C-751 Chlorine Scrubber L/G Ratio	Control System Calculation	TBD[1]	N/A
C-751 Chlorine Scrubber pH	pH Meter	AI-203/AI-223	Annual
Ash Feedrate	Control System Calculation	TBD[1]	N/A
Chlorine Feedrate	Control System Calculation	TBD[1]	N/A
SVM Feedrate	Control System Calculation	TBD[1]	N/A
LVM Feedrate	Control System Calculation	TBD[1]	N/A
Mercury Feedrate	Control System Calculation	TBD[1]	N/A

[1]TBD means "to be determined". These locations are normally calculated values which are not direct readings from an instrument.

V.D.2. Operating Conditions for the Vinyl II Plant Boilers (F-410 and F-420)

The F-410 and F-420 Boilers shall be subject to the following provisions and operating conditions until such time the Permittee conducts a Comprehensive Performance Test (CPT) in accordance with the Hazardous Waste Combustors Maximum Achievable Control Technology (HWC-MACT) timelines and requirements. After the Administrative Authority issues a Finding of Compliance on the results of the CPT, this permit will be modified and the applicable provisions and operating conditions pertaining to the normal operation of the F-410 and F-420 Boilers will be transferred to the Permittee's Title V Air Permit.

V.D.2.a. Performance Standards Requirements

V.D.2.a.(1). The F-410 and F-420 Boilers shall achieve a Destruction and Removal Efficiency (DRE) of 99.99 percent for each principal organic hazardous constituent (POHC). The DRE shall be determined by using the method specified in LAC 33:V.3009.A. The POHCs are:

- 1,1, 2-trichloroethane
- Chlorobenzene

V.D.2.a.(2). The Permittee shall control emissions of hydrogen chloride (HCl) such that the rate of emissions from each stack is no greater than 2,270 grams per hour.

V.D.2.a.(3). The Permittee shall control emissions of chlorine (Cl_2) such that the rate of emissions from the stack is no greater than 91 grams per hour.

V.D.2.a.(4). The emissions of particulate matter shall not exceed 0.08 grains per dry standard cubic foot of stack gas, corrected to 7 percent oxygen by volume, in accordance with the formulas specified in LAC 33:V.3011.

V.D.2.a.(5). The emissions of carbon monoxide, corrected to 7 percent oxygen, shall not exceed 100 parts per million by volume on an hourly rolling average in accordance with LAC 33:V.3009.B.

V.D.2.b. Process Operating Conditions

V.D.2.b.(1). Group A Parameter Limits

The Permittee shall operate the F-410 and F-420 Boilers with a functional automatic waste feed cut off system which terminates waste feeds to the boilers when operating and process conditions deviate from the operating parameter limits prescribed in Table V.D.2-1 and/or the following additional requirements for which no operating parameter limits are specified:

V.D.2.b.(1).(a). Whenever hazardous waste is in the units, the boilers must be kept totally sealed to protect against the escape of fugitive emissions (LAC 33:V.3005.E.7).

V.D.2.b.(1).(b). The Permittee shall immediately stop the flow of hazardous waste into the boiler should sample flow to the CEMS cease (other than normal calibration periods).

V.D.2.b.(1).(c). The Permittee shall analyze values form the CEMS at a minimum of every fifteen (15) seconds. The Permittee must record these values every sixty (60) seconds in order to demonstrate compliance with monitoring requirements.

V.D.2.b.(1).(d). The Permittee must operate all Continuous Monitoring System (CMS) components consistent with the manufacturer's specifications.

V.D.2.b.(1).(e). The Permittee must operate all Continuous Monitoring System (CMS) components consistent with the manufacturer's specifications.

V.D.2.b.(2). Group B and C Parameter Limits

Although the automatic waste feed cut off systems do not have set points for the Group B and Group C parameter limits, the Permittee shall operate the boilers without exceeding the Group B parameter limits in Table V.D.2-2. In addition, O_2 shall be monitored continuously in accordance with CEMS regulations. O_2 level is provided as a correction factor, and as such, no limit for O_2 is provided under this condition.

Table V.D.2-1
Group A Operating Parameter Limits
Vinyl II Plant Boilers (F-410 and F-420)
Automatic Waste Feed Cut Offs

Control Parameter	Final Operating Limits
Maximum total hazardous waste feed rate	1,680,000 grams/hr, hourly-rolling average
Minimum combustion zone temperature	1,142 °C, hourly-rolling average
Maximum combustion zone temperature	1,364 °C, hourly-rolling average
Maximum combustion air flow rate	7,626 scfm, hourly-rolling average
Maximum stack gas carbon monoxide	100 ppmv, corrected to 7% oxygen on a dry gas basis, hourly-rolling average
Minimum HCl absorber blowdown flow rate	32,700 pounds per hour, hourly-rolling average
Minimum HCl absorber L/G ratio	3.0, hourly-rolling average
Minimum chlorine scrubber blowdown flow rate	26,300 pounds per hour, hourly-rolling average
Minimum chlorine scrubber L/G ratio	3.2, hourly-rolling average
Minimum chlorine scrubber feed pH	8.0, hourly-rolling average

Table V.D.2-2
Group B and C Operating Parameter Limits
Vinyl II Plant Boilers (F-410 and F-420)

Control Parameter	Final Operating Limits Automatic Waste Feed Cut Off Point
Minimum atomizing fluid pressure	40 psig, 1-minute average
Maximum ash feed rate	7,080 grams/hr, hourly-rolling average
Maximum total chlorine and HCl feed rate (Tier III)	1,430,000 grams/hr, hourly-rolling average
Maximum emission rate limit for total Chromium (Tier III)	0.32 g/hr, hourly-rolling average
Maximum Metals Feed Rate Total Feed Streams	
Maximum feed rate of Antimony (Adjusted Tier I)	4.77 g/hr, hourly-rolling average
*Maximum feed rate of Arsenic (Adjusted Tier I)	0.48 g/hr, hourly-rolling average
Maximum feed rate of Barium (Adjusted Tier I)	2.22 g/hr, hourly-rolling average
*Maximum feed rate of Beryllium (Adjusted Tier I)	0.16 g/hr, hourly-rolling average
*Maximum feed rate of Cadmium (Adjusted Tier I)	0.91 g/hr, hourly-rolling average
*Maximum feed rate of total Chromium (Tier III)	23.6 g/hr, hourly-rolling average
Maximum feed rate of Lead (Adjusted Tier I)	2.27 g/hr, hourly-rolling average
Maximum feed rate of Mercury (Adjusted Tier I)	12.39 g/hr, hourly-rolling average
Maximum feed rate of Silver (Adjusted Tier I)	11.28 g/hr, hourly-rolling average
Maximum feed rate of Thallium (Adjusted Tier I)	0.79 g/hr, hourly-rolling average

* The feed rates of arsenic, beryllium, cadmium, and total chromium are limited to levels such that the sum of the rations of the actual feed rate to the feed rate limits specified in Table V.D.2-2 shall not exceed 1.0, as provided by the following equation.

$$\sum_{i=1}^{n} AFR_{(i)}/FRL_{(i)} \leq 1.0$$

$AFR_{(i)}$ = **Actual Feed Rate (AFR)**
The actual feed rate of carcinogenic metal (i) introduced into the combustion chamber from all TTU feedstreams.

n = Number of Carcinogenic Metals.

$FRL_{(i)}$ = **Feed Rate Limit (FRL)**
The regulatory feed limit of carcinogenic metal (i) listed in Table V.D.2-2

TABLE V.D.2-3
VINYL II PLANT BOILERS (F-410 AND F-420)
INSTRUMENTATION TO BE CALIBRATED ACCORDING TO MANUFACTURER'S SPECIFICATIONS

Control Parameter	Instrument Description	DCS Tag #	Calibration frequency
Hazardous waste feed rate	DP Flowmeter	AI-7602	Annual
Combustion temperature	Thermocouple and Transmitter	AI-7623 and AI-7633	Annual
Combustion Air Flowrate	DP Flowmeter	AI-7604 and AI-7624	Annual
Stack gas oxygen	ABB Advance Optima – O_2 Analyzer	AI-7647 and AI-7657	Annual – RATA Quarterly - ACA
Stack gas carbon monoxide	ABB Advance Optima – CO Analyzer	AI-7646 and AI-7656	Annual – RATA Quarterly - ACA
Atomizing Steam pressure	DP Pressure Transmitter	AI-7603	Annual
C-412/422 HCl Absorber Pressure Drop	DP Pressure Transmitter	AI-7638	Annual
C-412/422 HCl Absorber Blowdown Flowrate	Flowmeter	AI-7503	Annual
C-412/422 HCl Absorber L/G Ratio	Control System Calculation	AC-71857	N/A
C-412/422 Recycle Flowrate (Part of L)	Flowmeter	AI-7658	Annual
C-412/422 Makeup Water Flowrate (Part of L)	Flowmeter	AI-7611 and AI-7631	Annual
C-412/422 Absorber Water Flowrate (L of L/G)	Control System Calculation	AC-71847	N/A
C-413/423 HCl Scrubber Pressure Drop	DP Pressure Transmitter	AI-7661 and AI-7671	Annual
C-413/423 HCl Scrubber Makeup Water Flowrate (Alternate for Blowdown)	Control System Calculation	AC-7714	N/A
C-413/423 HCl Scrubber L/G Ratio	Control System Calculation	AC-71853	N/A
C-413/423 HCl Scrubber Feed pH	pH probe	AI-7663 and AI-7673	Annual
C-413/423 HCL Scrubber Water Flowrate (L of L/G)	Control System Calculation	AC-71849	N/A
C-413/423 Cell Effluent Flowrate (Part of L)	DP Flowmeter	AI-7616	Annual
C-413/423 Demister Flowrate (Part of L)	Flowmeter	AI-7684	Annual
C-413/423 Recycle Flowrate (Part of L)	DO Flowmeter	AI-7615 and AI-7635	Annual
Maximum Ash Feedrate	Control System Calculation	TBD[1]	N/AI
Maximum Chlorine Feedrate	Control System Calculation	TBD[1]	N/AI
Maximum LVM Feedrate	Control System Calculation	TBD[1]	N/A
Maximum SVM Feedrate	Control System Calculation	TBD[1]	N/A
Maximum Chromium Feedrate	Control System Calculation	TBD[1]	N/A
Maximum Mercury Feedrate	Control System Calculation	TBD[1]	N/A

[1]TBD means "to be determined". These locations are normally calculated values which are not direct readings from an instrument.

V.D.3. Operating Conditions for the Glycol I Plant Boiler (R-4)

The R-4 Boiler shall be subject to the following provisions and operating conditions until such time the Permittee conducts a Comprehensive Performance Test (CPT) in accordance with the Hazardous Waste Combustors Maximum Achievable Control Technology (HWC-MACT) timelines and requirements. After the Administrative Authority issues a Finding of Compliance on the results of the CPT, this permit will be modified and the applicable provisions and operating conditions pertaining to the normal operation of the R-4 Boiler will be transferred to the Permittee's Title V Air Permit.

V.D.3.a. Performance Standards Requirements

V.D.3.a.(1). The R-4 Boiler shall achieve a Destruction and Removal Efficiency (DRE) of 99.99 percent for each principal organic hazardous constituent (POHC). The DRE shall be determined by using the method specified in LAC 33:V.3009.A. The POHCs are:

- 1, 2-dichloropropane
- Chlorobenzene

V.D.3.a.(2). The Permittee shall control emissions of hydrogen chloride (HCl) such that the rate of emission from the stack is no greater than 90.8 grams per hour.

V.D.3.a.(3). The Permittee shall control emissions of chlorine (Cl_2) such that the rate of emissions from the stack is no greater than 113.5 grams per hour.

V.D.3.a.(4). The emissions of particulate matter shall not exceed 0.08 grains per dry standard cubic foot of stack gas, corrected to 7 percent oxygen by volume, in accordance with the formulas specified in LAC 33:V.3011.

V.D.3.a.(5). The emissions of carbon monoxide, corrected to 7 percent oxygen, shall not exceed 100 parts per million by volume on an hourly rolling average in accordance with LAC 33:V.3009.B.

V.D.3.b. Process Operating Conditions

V.D.3.b.(1). Group A Parameter Limits

The Permittee shall operate the R-4 Boiler with a functional automatic waste feed cut off system which terminates waste feeds to the boiler when operating and process conditions deviate from the operating parameter limits prescribed in Table V.D.3-1 and/or the following additional requirements for which no operating parameter limits are specified:

V.D.3.b.(1).(a). Whenever hazardous waste is in the unit, the boiler must be kept totally sealed to protect against the escape of fugitive emissions (LAC 33:V.3005.E.7).

V.D.3.b.(1).(b). The Permittee shall immediately stop the flow of hazardous waste into the boiler should sample flow to the CEMS cease (other than normal calibration periods).

V.D.3.b.(1).(c). The Permittee shall analyze values form the CEMS at a minimum of every fifteen (15) seconds. The Permittee must record these values every sixty (60) seconds in order to demonstrate compliance with monitoring requirements.

V.D.3.b.(1).(d). The Permittee must operate all Continuous Monitoring System (CMS) components consistent with the manufacturer's specifications.

V.D.3.b.(1).(e). The Permittee must operate all Continuous Monitoring System (CMS) components consistent with the manufacturer's specifications.

V.D.3.b.(2). Group B and C Parameter Limits

Although the automatic waste feed cut off systems do not have set points for the Group B and Group C parameter limits, the Permittee shall operate the boiler without exceeding the Group B parameter limits in Table V.D.3-2. In addition, O_2 shall be monitored continuously in accordance with CEMS regulations. O_2 level is provided as a correction factor, and as such, no limit for O_2 is provided under this condition.

Table V.D.3-1
Group A Operating Parameter Limits
Glycol I Plant Boiler (R-4)
Automatic Waste Feed Cut Offs

Control Parameter	Final Operating Limits
Maximum total hazardous waste feed rate	1,634,700 grams/hr, hourly-rolling average
Minimum combustion zone temperature	1042 °C, hourly-rolling average
Maximum combustion air flow rate	8,917 scfm, hourly-rolling average
Maximum stack gas carbon monoxide	100 ppmv, corrected to 7% oxygen on a dry gas basis, hourly-rolling average
Minimum absorber blowdown water flow rate	22,370 lbs/hr, hourly-rolling average
Minimum absorber L/G	0.5, hourly-rolling average
Minimum chlorine scrubber blowdown water flow rate	35,380 lbs/hr, hourly-rolling average
Minimum chlorine scrubber L/G	1.1, hourly-rolling average
Minimum chlorine scrubber feed pH	8.0, hourly-rolling average

Table V.D.3-2
Group B and C Operating Parameter Limits
Glycol I Plant Boiler (R-4)

Control Parameter	Final Operating Limits
Minimum atomizing fluid pressure	40 psig, 1-minute average
Maximum ash feed rate	2.95 lbs/hr, hourly-rolling average
Maximum total chlorine and HCl feed rate (Tier III)	1,680 lbs/hr, hourly-rolling average
Maximum Metals Feed Rate Total Feed Streams	
Maximum feed rate of Antimony (Adjusted Tier I)	46.8 g/hr, hourly-rolling average
*Maximum feed rate of Arsenic (Adjusted Tier I)	0.8 g/hr, hourly-rolling average
Maximum feed rate of Barium (Adjusted Tier I)	138 g/hr, hourly-rolling average
*Maximum feed rate of Beryllium (Adjusted Tier I)	0.19 g/hr, hourly-rolling average
*Maximum feed rate of Cadmium (Adjusted Tier I)	0.19 g/hr, hourly-rolling average
*Maximum feed rate of total Chromium (Adjusted Tier I)	0.3g/hr, hourly-rolling average
Maximum feed rate of Lead (Adjusted Tier I)	75.6 g/hr, hourly-rolling average
Maximum feed rate of Mercury (Adjusted Tier I)	49.7 g/hr, hourly-rolling average
Maximum feed rate of Silver (Adjusted Tier I)	160 g/hr, hourly-rolling average
Maximum feed rate of Thallium (Adjusted Tier I)	170 g/hr, hourly-rolling average

* The feed rates of arsenic, beryllium, cadmium, and total chromium are limited to levels such that the sum of the rations of the actual feed rate to the feed rate limits specified in Table V.D.3-2 shall not exceed 1.0, as provided by the following equation.

$$\sum_{i=1}^{n} AFR_{(i)}/FRL_{(i)} \leq 1.0$$

$AFR_{(i)}$ = **Actual Feed Rate (AFR)**
The actual feed rate of carcinogenic metal (i) introduced into the combustion chamber from all TTU feedstreams.

n = Number of Carcinogenic Metals.

$FRL_{(i)}$ = **Feed Rate Limit (FRL)**
The regulatory feed limit of carcinogenic metal (i) listed in Table V.D.3-2

TABLE V.D.3-3
GLYCOL I PLANT THERMAL TREATMENT UNIT (R-4)
INSTRUMENTATION TO BE CALIBRATED ACCORDING TO MANUFACTURER'S SPECIFICATIONS

Control Parameter	Instrument Description	DCS Tag #	Calibration frequency
Hazardous waste feed rate	Flowmeter	AI(105) AI(155)	Annual
Combustion temperature	Thermocouple	*AI(114)* *AI(124)* *AI(134)*	Annual
Stack gas flow rate	*To be installed*	*AC(2801)*	Annual
Stack gas oxygen	*Horiba Paramagnetic – Model ENDA 1000*	*AI(227)* *AI(237)*	Annual – RATA Quarterly - ACA
Stack gas carbon monoxide	*Horiba IR Analyzer – Model ENDA 1000*	*AI(216)* *AI(226)*	Annual – RATA Quarterly - ACA
Atomizing air pressure	*Rosemont 1151 Pressure Transmitter*	AI(142)	Annual
T-200 Chlorine Absorber L/G Ratio	Control System Calculation	AC(3887)	N/A
T-200 Minimum Chlorine Absorber Blowdown	Rosemont Magmeter Flowmeter	AI(204)	Annual
T-200 Chlorine Absorber Process Water Flowmeter (Part of L)	Rosemont 3051 Smart Flowmeter	AI(205) AI(235)	Annual
T-200 Chlorine Absorber Recirculation Flowrate (Part of L)	Rosemont Magmeter Flowmeter	AI(267)	Annual
T-200 Chlorine Absorber Water Flowrate (L for L/G)	Sum of Flows 8-9	AC(916)	N/A
T-201 scrubber feed pH	pH meter	*AI(214)* *AI(224)*	Annual
T-201 Minimum Scrubber Blowdown	Rosemont Magmeter Flowmeter	AI(244)	Annual
T-201 Process Water Flowrate (Part of L)	Rosemont 1151 Flowmeter and Rosemont 3051 Flowmeter	AI(202) AI(222)	Annual
Minimum scrubber system differential pressure	Rosemont 3051 Smart Differential pressure transmitter	AI(123) AI(212)	Annual
T-201 Recirculation Flowrate (Part of L)	Rosemont Magmeter Flowmeter	AI(249)	Annual
T-201 Demister Water Flowrate (Part of L)	Rosemont 3051 Smart Flowmeter	AI(220)	Annual
T-201 Caustic Flowrate (part of L)	Rosemont Smart Flowmeter	AI(201)	Annual
T-201 Scrubber Water Flowrate (L of L/G)	Sum of flows (#13-16)	AC(958)	N/A
Minimum T-201 Scrubber L/G Ratio	Control System Calculation	AC(3893)	N/A
Maximum Ash Feedrate	Control System Calculation	AC(2901)	N/A
Maximum Chlorine Feedrate	Control System Calculation	AC(3854)	N/A
Maximum Chromium Feedrate	Control System Calculation	AC(2862)	N/A
Maximum Mercury Feedrate	Control System Calculation	AC(2861)	N/A

V.D.4. Operating Conditions for the Solvents/EDC Incinerator (F-700)

The Solvents/EDC Incinerator F-700 shall be subject to the following provisions and operating conditions until such time the Permittee conducts a Comprehensive Performance Test (CPT) in accordance with the Hazardous Waste Combustors Maximum Achievable Control Technology (HWC-MACT) timelines and requirements. After the Administrative Authority issues a Finding of Compliance on the results of the CPT, this permit will be modified and the applicable provisions and operating conditions pertaining to the normal operation of the Solvents/EDC Incinerator F-700 will be transferred to the Permittee's Title V Air Permit.

V.D.4.a. Performance Standards Requirements

V.D.4.a.(1). The Solvents/EDC Incinerator F-700 shall achieve a Destruction and Removal Efficiency (DRE) of 99.99 percent for each principal organic hazardous constituent (POHC). The DRE shall be determined by using the method specified in LAC 33:V.3111.A.1. The POHCs are:

- 1, 2-dichloropropane
- Chlorobenzene

V.D.4.a.(2). The Permittee shall control emissions of hydrogen chloride (HCl) such that the rate of emission from the stack is no greater than 90.8 grams per hour.

V.D.4.a.(3). The Permittee shall control emissions of chlorine (Cl_2) such that the rate of emissions from the stack is no greater than 113.5 grams per hour.

V.D.4.a.(4). The emissions of particulate matter shall not exceed 0.08 grains per dry standard cubic foot of stack gas, corrected to 7 percent oxygen by volume, in accordance with the formulas specified in LAC 33:V.Chapter 31.

V.D.4.a.(5). The emissions of carbon monoxide, corrected to 7 percent oxygen, shall not exceed 100 parts per million by volume on an hourly rolling average.

V.D.4.b. Process Operating Conditions

V.D.4.b.(1). Group A Parameter Limits

The Permittee shall operate the Solvents/EDC Incinerator with a functional automatic waste feed cut off system which terminates waste feeds to the incinerator when operating and process conditions deviate from the operating parameter limits prescribed in Table V.D.4-1 and/or the following additional requirements for which no operating parameter limits are specified:

V.D.4.b.(1).(a). Whenever hazardous waste is in the unit, the incinerator must be kept totally sealed to protect against the escape of fugitive emissions (LAC 33:V.3005.E.7).

V.D.4.b.(1).(b). The Permittee shall immediately stop the flow of hazardous waste into the incinerator should sample flow to the CEMS cease (other than normal calibration periods).

V.D.4.b.(1).(c). The Permittee shall analyze values form the CEMS at a minimum of every fifteen (15) seconds. The Permittee must record these values every sixty (60) seconds in order to demonstrate compliance with monitoring requirements.

V.D.4.b.(1).(d). The Permittee must operate all Continuous Monitoring System (CMS) components consistent with the manufacturer's specifications.

V.D.4.b.(1).(e). The Permittee must operate all Continuous Monitoring System (CMS) components consistent with the manufacturer's specifications.

V.D.4.b.(2). Group B and C Parameter Limits

Although the automatic waste feed cut off systems do not have set points for the Group B and Group C parameter limits, the Permittee shall operate the incinerator without exceeding the Group B parameter limits in Table V.D.4-2. In addition, O_2 shall be monitored continuously in accordance with CEMS regulations. O_2 level is provided as a correction factor, and as such, no limit for O_2 is provided under this condition.

Table V.D.4-1
Group A Operating Parameter Limits
Solvent/EDC Incinerator (F-700)
Automatic Waste Feed Cut Offs

Control Parameter	Final Operating Limits Automatic Waste Feed Cut Off Point
Maximum total hazardous waste feed rate	5000 lbs/hr, hourly-rolling average
Minimum combustion zone temperature	Minimum temperature: 1042 °C, hourly-rolling average
Maximum combustion zone temperature	Maximum temperature: 1500 °C, hourly-rolling average
Maximum combustion stack gas flow rate	3,891 acfm, hourly-rolling average
Maximum stack gas carbon monoxide	100 ppmv, corrected to 7% oxygen on a dry gas basis, hourly-rolling average
Minimum HCl absorber makeup water flow rate	100 gpm, hourly-rolling average
Minimum HCl absorber L/G	0.134 gpm/acfm, hourly-rolling average
Minimum pressure drop across chlorine scrubber	2.0 psi, hourly-rolling average
Minimum chlorine scrubber makeup water flow rate	500 gpm, hourly-rolling average
Minimum chlorine scrubber L/G	0.257 gpm/acfm, hourly-rolling average
Minimum chlorine scrubber feed pH	8.8 hourly-rolling average

Table V.D.4-2
Group B and C Operating Parameter Limits
Solvent/EDC Incinerator (F-700)

Control Parameter	Final Operating Limits Automatic Waste Feed Cut Off Point
Minimum atomizing fluid pressure	40 psig, 1-minute average
Maximum ash feed rate	1.52 lb/hr, hourly-rolling average
Maximum total chlorine and HCl feed rate (Tier III)	4,540 pounds/hr, hourly-rolling average
Maximum SVM (Cd & Pb)	0.004 pounds per hour, hourly-rolling average
Maximum LVM (As, Be & Cr)	0.014 pounds per hour, hourly-rolling average

TABLE V.D.4-3 / SOLVENT EDC INCINERATOR (F-700) INSTRUMENTATION TO BE CALIBRATED ACCORDING TO MANUFACTURER'S SPECIFICATIONS			
Control Parameter	**Instrument Description**	**DCS Tag#**	**Control Parameter**
Hex Feed Flow	Flow Meter	AI-5154, AI-5122	Annual
EDC 1 Heavies Feed Rate	Flow Meter	AI-5152	Annual
Solvent Heavies Feed Rate	Flow Meter	AI-5121	Annual
Glycol 1 Feed Rate	Flow Meter	AI-5111	Annual
"Taffy" Feed Rate	Flow Meter	AI-5151	Annual
Slim Nozzle Feed Rate	Flow Meter	AI-5131	Annual
General Waste Feed Rate	Flow Meter	AI-5101	Annual
D-42 Vent Flow Rate	Flow Meter	AI-5145	Annual
K-102 Vent Flow Rate	Flow Meter	AI-5150	Annual
Tet Hydrogen Vent Flow Rate	Flow Meter	AI-5141	Annual
D-700 Vent Flow Rate	Flow Meter	AI-5127	Annual
D-702 Vent Flow Rate	Flow Meter	AI-5112	Annual
Hazardous waste feed rate	Control System Calculation	TBD[1]	N/A
Combustion Chamber Temperature (West/South)	Thermocouple	AI-5116/AI-5106	Annual
Stack Gas Flow Rate	Flow Meter	AI-5269	Annual
Stack gas oxygen	Paramagnetic	AI-229 and Ai-239	Annual – RATA Quarterly - ACA
Stack gas carbon monoxide	IR Analyzer	AI-230 and AI-240	Annual – RATA Quarterly - ACA
Steam Pressure to Hex Nozzle	Pressure Transmitter	AI-5110	Annual
Slim Nozzle Steam Pressure	Pressure Transmitter	AI-5120	Annual
Air Pressure to "Taffy" Nozzle	Pressure Transmitter	AI-5125	Annual
Steam Pressure to General Waste Nozzle	Pressure Transmitter	AI-5130	Annual
C-720 Chlorine Absorber Makeup Water Flow Rate	Flow Meter	AI-5238	Annual
C-730 HCl Scrubber Makeup Water Flow Rate	Flow Meter	AI-5248	Annual
C-730 HCl Scrubber inlet temperature	Thermocouple	TBD[1]	Annual
C-730 HCl Scrubber Discharge pH	pH probe	AI-5246 and AI-5234	Annual
C-730 HCl Scrubber L/G Ratio	Control System Calculation	TBD[1]	N/A
C-720 Chlorine Absorber L/G Ratio	Control System Calculation	TBD[1]	N/AI
C-720 HCl Scrubber Differential Pressure	Differential Pressure Transmitter	AI-5238	Annual
C-730 HCl Scrubber Differential Pressure	Differential Pressure Transmitter	AI-5233	Annual
Total Ash Feed Rate	Control System Calculation	TBD[1]	N/A
Total Chlorine/Chloride Feed Rate	Control System Calculation	TBD[1]	N/A
Total SVM Feed Rate	Control System Calculation	TBD[1]	N/A
Total LVM Feed Rate	Control System Calculation	TBD[1]	N/A

[1]TBD means "to be determined". These locations are normally calculated values which are not direct readings from an instrument.

V.D.5. Operating Conditions for the Environmental Operations TTU (I-200)

The Environmental Operations TTU (I-200) is in the process of closure and no longer actively manages hazardous waste. All waste feed systems to I-200 have been dismantled. Therefore, no parameter limits (OPLs) will be specified for I-200. However, until clean closure of I-200 and all ancillary systems is verified by the Administrative Authority, I-200 will remain referenced in this permit as a permitted hazardous waste unit.

V.E. RISK-BASED CONDITIONS

(RESERVED)

V.F. BLOCK 80 HAZARDOUS WASTE LANDFILL

V.F.1. General Design, Construction, and Requirements

V.F.1.a. The design, construction, and operation of the landfill must comply with this permit, the Rules and Regulations as set forth in LAC 33:V.517 and LAC 33:V.Chapter 25, and as specified in the plans and specifications for design, construction, and operation as included in Attachment 1 of this permit. All plans and specifications for the design, construction, and operation of the hazardous waste landfill are incorporated by reference into this permit.

V.F.1.b. Any variance from or modification to the approved drawings, plans, and specifications incorporated by reference in this permit or the terms and conditions of this permit is prohibited without prior written approval from the Administrative Authority.

V.F.1.c. The Administrative Authority reserves the right to require the implementation of additional procedures if it is subsequently determined that a change is implemented without prior approval, as specified in Condition V.F.1.b.

V.F.2. General Operating Conditions

The Permittee shall operate and maintain the Block 80 Hazardous Waste Landfill to meet the following performance standards:

V.F.2.a. Operate and maintain a run-on control system capable of preventing flow onto the active portion of the landfill during peak discharge from a 24-hour, 25-year storm in accordance with LAC 33:V.2503.D. Any incidences of run-on entering the containment areas shall be reported and made a part of the Annual Report.

V.F.2.b. Operate and maintain a run-off management system to collect and control at least the water volume resulting, from a 24-hour, 25-year storm in accordance with LAC 33:V.2503.E. Any incidences of run-off not collected and controlled shall be reported and made a part of the Annual Report.

V.F.2.c. The Permittee may landfill only wastes which at a minimum meet the criteria specified in LAC 33:V.2503, 2511, 2513, 2515, 2517 and 2519.

V.F.2.d. The Permittee shall not place bulk or non-containerized liquid hazardous waste or hazardous waste containing free liquids (whether or not absorbents have been added) in the landfill.

V.F.2.e. All collection and holding facilities (sumps and tanks) associated with the run-on and run-off containment systems shall be emptied expeditiously to maintain the design capacity of the system as required by LAC 33:V.2503.F.

V.F.2.f. Waste within the landfill must be covered or otherwise managed to insure minimum wind dispersal as required by LAC 33:V.2503.G.

V.F.2.g. While in operation, the landfill shall be inspected weekly and after storms, as required under LAC 33:V.2507.C, to detect evidence of any of the following:

V.F.2.g.(1). deterioration, malfunctions, or improper operation of run-on and run-off control systems;

V.F.2.g.(2). the presence of liquids in leak detection systems;

V.F.2.g.(3). proper functioning of wind dispersal control system (when applicable); and

V.F.2.g.(4). the presence of leachate in and proper functioning of leachate collection and removal system.

V.F.2.h. Accumulated rainfall and groundwater must be removed from the active portions of the landfill in a timely manner.

V.F.2.i. The receiving and monitoring of wastes into the landfills shall be performed according to LAC 33:V.1527, and the Waste Analysis Plan (Attachment 1).

V.F.2.j. The leak detection system and the leachate collection and removal system must be properly maintained and inspected weekly and after storms to detect the presence of liquids and the proper functioning of the systems. If liquids are encountered at the level of greater than one (1) foot above the lip of the collection sump in a leachate collection system, it shall be removed to the lowest practical level. For both leachate collection and detection systems, records shall be maintained on the amount of fluid removed each week. The volume of fluid removed from each leachate collection and detection system must be reported quarterly.

V.F.2.k. The Permittee must maintain operating records as required by LAC 33:V.2509. At a minimum the accurate location of each waste load shall be recorded in the operating record within twenty-four (24) hours of being placed in the landfill. These records are to include a system of accurate tracking of each waste load throughout the facility. The tracking system must record: pre-acceptance information and analyses, the date of the pre-acceptance data, all internal transfers of wastes from receipt at the landfill to treatment (if applicable), storage and final disposal, all internal waste transfers for on-site generated wastes such as contaminated rainwater, landfill leachate, the contents, date, weight or volume and location of wastes disposed of in the landfill.

V.F.3. Permitted and Prohibited Waste

V.F.3.a. Permitted Waste

V.F.3.a.(1). Subject to the terms of this permit, the Permittee is allowed to dispose of ash generated by the treatment of hazardous waste in the Permittee's onsite thermal treatment units and as described in the Permittee's Part B Permit Application.

V.F.3.a.(2). The Permittee may request approval from the Administrative Authority to dispose of non-hazardous debris generated from onsite turnaround and/or closure activities (e.g., refractory, fiberglass, and column packing) associated with the Permittee's thermal treatment units. Approval to dispose of non-hazardous debris in the landfill will be granted by the Administrative Authority on a case-by-basis. Requests by the Permittee for Administrative Authority approval must be accompanied by the following information and data (e.g., analytical data, narratives, etc.):

V.F.3.a.(2).(a). detailed description(s) of the type, volume, and physical and chemical characteristics of the non-hazardous debris;

V.F.3.a.(2).(b). drawings and descriptions depicting the specific location(s) within the landfill that the Permittee proposes to dispose of the non-hazardous debris;

V.F.3.a.(2).(c). information and/or data demonstrating that the non-hazardous debris has been properly decontaminated;

V.F.3.a.(2).(d). information and/or data demonstrating that the non-hazardous debris is compatible with all wastes disposed of in the landfill; and

V.F.3.a.(2).(e). information and/or data demonstrating that disposal of the non-hazardous debris will not compromise the stability of the landfill.

V.F.3.a.(3). The Administrative Authority reserves the right to require additional groundwater monitoring parameters to be added to the Block 80 Hazardous Waste Landfill groundwater monitoring program based upon profiles of non-hazardous debris waste disposed of in the Block 80 Hazardous Waste Landfill on a case-by case basis.

V.F.4. Closure

Closure shall be in conformance with LAC 33:V.2521, LAC 33:V.Chapter 35, and the approved closure plan as referenced in Attachment 1.

V.F.4.a. At final closure, the Permittee must cover the landfill with a final cover designed and constructed to:

V.F.4.a.(1). provide long-term minimization of migration of liquids through the closed landfill;

V.F.4.a.(2). function with minimum maintenance;

V.F.4.a.(3). promote drainage and minimize erosion or abrasion of the cover;

V.F.4.a.(4). accommodate settling and subsidence so that the cover's integrity is maintained; and

V.F.4.a.(5). have a permeability less than or equal to the permeability of any bottom liner system or natural subsoils present.

V.F.5. Post-Closure

Upon closure certification and modification of this permit, post-closure shall be in conformance with LAC 33:V.2521, LAC 33:V.Chapter 35, and the approved post-closure plan as referenced in Attachment 1.

V.F.5.a. After final closure, the Permittee must comply with all post-closure requirements contained in LAC 33:V.3519-3527, including maintenance and monitoring throughout the post-closure care period (as specified in LAC 33:V.3521.A.1). The Permittee must:

V.F.5.a.(1). maintain the integrity and effectiveness of the final cover, including making repairs to the cap as necessary to correct the effects of settling, subsidence, erosion, or other events;

V.F.5.a.(2). maintain and monitor the leak detection system in accordance with LAC 33:V.2503.L.4.d, 2503.L.5, and 2507.D, where such a system is present between double liner systems and comply with all other applicable leak detection system requirements of LAC 33:V.Subpart 1;

V.F.5.a.(3). continue to operate the leachate collection and removal system until leachate is no longer detected;

V.F.5.a.(4). maintain and monitor the groundwater monitoring system and comply with all other applicable requirements of LAC 33:V.Chapter 33;

V.F.5.a.(5). prevent run-on and run-off from eroding or otherwise damaging the final cover; and

V.F.5.a.(6). protect and maintain surveyed benchmarks used in complying with LAC 33:V.Chapter 33.

V.G. PERMIT CONDITIONS APPLICABLE TO PERMITTED CLOSED UNITS

V.G.1. Post-Closure Care Period

The post-closure care period will be in effect for the period of thirty (30) years, unless extended or shortened by the Administrative Authority, as specified in LAC 33:V.3521.A.1 and 2.

V.G.1.a. NWLF/CAMU: Closure certification report was submitted on January 17, 2007 and closure was verified on May 8, 2007. The post-closure care period will commence upon the effective date of this permit and in accordance with the approved Post-Closure Plan referenced in Attachment 1 of this permit.

V.G.2. Post-Closure Maintenance

The owner or operator must comply with all post-closure requirements contained in LAC 33:V.3519 through 3527 and Condition III.P of this permit, including maintenance and monitoring throughout the post-closure care period specified in the permit under Condition V.G.1 and LAC 33:V.3521.A.1. The owner or operator must:

V.G.2.a. for all permitted units, maintain the integrity and effectiveness of the final cover, including making repairs as necessary to correct the effects of settling, subsidence, erosion, or other events;

V.G.2.b. for all permitted units, maintain and monitor the groundwater monitoring system and comply with all other applicable requirements of LAC 33:V.Chapter 33;

V.G.2.c. for all permitted units, manage a run-on and run-off control system to prevent erosion at and other damage to the final cover;

V.G.2.d. for all permitted units, maintain the cover with a final cover designed, constructed and maintained to:

V.G.2.d.(1). provide long-term minimization of migration of liquids through the landfill;

V.G.2.d.(2). function with minimal maintenance at all permitted units;

V.G.2.d.(3). promote drainage and minimize erosion or abrasion of the final cover at all permitted units;

V.G.2.d.(4). accommodate settling and subsidence, as necessary, so that the cover's integrity is maintained for all permitted units; and

V.G.2.d.(5). have a permeability less than or equal to the permeability of any bottom liner system or natural sub-soils present at the landfill.

V.G.2.e. The annual report shall include a Post-Closure activity report for the NWLF/CAMU.

V.G.3. Leachate Collection and Leak Detection Systems

V.G.3.a. The Permittee must continue to operate and maintain the NWLF/CAMU leachate collection and recovery trench system as described in the latest approved version of the "Remediation Plan – Northwest Landfill" referenced in Attachment 1. [Note: the "Remediation Plan – Northwest Landfill" was implemented prior to the unit's designation as the NWLF/CAMU].

V.G.3.b. The Permittee must continue to operate and maintain the NWLF/CAMU leak detection system as described in the latest approved version of the "Remediation Plan – Northwest Landfill" referenced in Attachment 1.

VI. GROUNDWATER PROTECTION

VI.A. APPLICABILITY

The regulations of LAC 33:V.Chapter 33 (Groundwater Protection), and Louisiana Hazardous Waste Control Law Revised Statute R.S., 30:2171 of the Environmental Quality Act, R.S., 30:2001 et seq., and the provisions of Condition VI shall apply to groundwater protection programs at the units identified in Tables IV-D and IV-E of this permit. All requirements of Condition VI must be satisfied and shall apply until the Administrative Authority has accepted the certification of completion of post-closure care required by regulation and under Condition III.P.7 of this permit. This includes compliance, closure, and post-closure care periods.

The units referenced in Tables IV-D and IV-E of this permit are subject to groundwater monitoring. The Permittee must establish, expand or continue assessment and corrective action programs for all regulated units where groundwater has been affected by hazardous waste, hazardous constituents, or parameters exceeding the assigned concentration limits. Assessment and corrective action programs shall be in accordance with the requirements of LAC 33:V.Chapter 33 and as subsequently directed by the Administrative Authority.

VI.B. REQUIRED PROGRAMS

The regulated units referenced in Tables IV-D (Block 80 Hazardous Waste Landfill) and IV-E (NWLF/CAMU) are under an ongoing Detection Monitoring Program. The Permittee must continue to conduct the Detection Monitoring Program per Condition VI.H of this permit using the existing monitoring system specified in Condition VI and as stated in the most current approved Groundwater Detection Monitoring Plan referenced in Attachment 1.

In the event statistically significant evidence that the concentration limits defined in Condition VI.D and Table VI-B of this permit have been exceeded in any groundwater point of compliance monitoring wells in Table VI-A of this permit, the Permittee shall modify the permit in accordance with LAC 33:V.321 and Condition VI.I of this permit in order to establish a compliance monitoring program. The establishment of concentration limits at the point of compliance does not exempt the Permittee from implementing corrective action to address contamination detected by monitoring wells (e.g., leak detection wells) that are not designated as point of compliance wells.

All wells and any associated piezometers described in Table VI-A of this permit must be maintained, protected from moving equipment, and cannot be abandoned unless exempted from the program at a later date by the Administrative Authority, or unless the integrity of the well or piezometer is threatened. In such a case, it must be replaced with a new well, in conformance with a work plan approved by the Administrative Authority (see Condition VI.L – Construction and Abandonment of Monitoring Wells and Geotechnical Boreholes). The Permittee must include revised facility maps in the Annual Report, depicting all monitoring wells associated with the regulated units.

VI.C. GROUNDWATER PROTECTION STANDARD

The groundwater protection standard shall be required during the Compliance Monitoring Program and/or Correction Action Program and is the concentration limit that shall indicate when corrective action must begin and when it may be terminated. The Administrative Authority shall establish the groundwater protection standard when hazardous constituents from a regulated unit have been detected (as defined by LAC 33.V.3303.A.1) in the groundwater.

Accordingly, the Permittee must comply with the conditions specified in this permit that are designed to ensure that hazardous constituents (Condition VI.D) detected (as defined by LAC 33.V.3303.A.1) do not exceed the concentration limits (Condition VI.D) in the uppermost permeable zones underlying the regulated units, beyond or below the point of compliance (Condition VI.E) during the compliance period (Condition VI.F).

VI.D. HAZARDOUS CONSTITUENTS, PARAMETERS, ANALYTICAL FREQUENCY AND CONCENTRATION LIMITS

The wells, hazardous constituents and concentration limits to which the protection standards of LAC 33:V.3305 apply are shown herein in Tables VI-A, VI-B, and VI-C. The sampling frequency for constituents is noted in Table VI-A. The Maximum Concentration Limits (MCLs) for each hazardous waste constituent specified in Tables VI-B (Block 80 HWLF) and VI-C (NWLF/CAMU) shall serve as the concentration limts.

VI.E. POINT OF COMPLIANCE

The point of compliance (POC) at which the groundwater protection standard of LAC 33:V.3305.A applies, and at which monitoring must be conducted, are the vertical intervals intercepted by the POC wells identified in Table VI-A. The horizontal limit of compliance must be the surface following an imaginary line connecting the risers of monitoring wells listed as POC wells in Table VI-A unless amended through permit modifications by the Administrative Authority in the future. The vertical limit of compliance must be the upper permeable zone.

If contamination is detected in the upper permeable zone underlying the waste management area, the next vertical aquifer or permeable zone must also be monitored. In the event that hazardous constituents are detected at the point of compliance above the groundwater protection standard, the Permittee shall institute a corrective action program. During the corrective action program (i.e., until such time as hazardous constituents are no longer detected above the groundwater protection standard at the point of compliance and beyond), the groundwater quality at each monitoring well (including point of compliance wells, plume defining wells and recovery wells) identified in Table VI-A must be monitored in order to determine the effectiveness of the corrective action. Additional monitoring wells may be installed, as required.

Table VI-A
Monitoring Well Network

Well	Regulated Unit	Well Type	Zone Screened	Sampling Frequency
Well UH1	Block 80 HWLF	Upgradient	Shallow Pervious	Semi-Annually
Well DH2	Block 80 HWLF	POC	Shallow Pervious	Semi-Annually
Well DH3	Block 80 HWLF	POC	Shallow Pervious	Semi-Annually
Well DH4	Block 80 HWLF	POC	Shallow Pervious	Semi-Annually
Well DH5	Block 80 HWLF	POC	Shallow Pervious	Semi-Annually
Well UN1	NWLF/CAMU	Upgradient	Deep Pervious	Semi-Annually
Well UN2	NWLF/CAMU	Upgradient	Deep Pervious	Semi-Annually
Well DN3	NWLF/CAMU	POC	Deep Pervious	Semi-Annually
Well DN4	NWLF/CAMU	POC	Deep Pervious	Semi-Annually
Well DN6	NWLF/CAMU	POC	Deep Pervious	Semi-Annually
Well DN7	NWLF/CAMU	POC	Deep Pervious	Semi-Annually
Well DN8	NWLF/CAMU	POC	Deep Pervious	Semi-Annually
Well NN5	NWLF/CAMU	Monitoring Well	Plaquemine Aquifer	Semi-Annually
Well LD2	NWLF/CAMU	Leak Detection	Shallow Pervious[1]	Semi-Annually
Well LD3	NWLF/CAMU	Leak Detection	Shallow Pervious[1]	Semi-Annually
Well LD4	NWLF/CAMU	Leak Detection	Shallow Pervious[1]	Semi-Annually
Well LD5	NWLF/CAMU	Leak Detection	Shallow Pervious[1]	Semi-Annually
Well LD6	NWLF/CAMU	Leak Detection	Shallow Pervious[1]	Semi-Annually
Well LD7	NWLF/CAMU	Leak Detection	Shallow Pervious[1]	Semi-Annually
Well LD8	NWLF/CAMU	Leak Detection	Shallow Pervious[1]	Semi-Annually

[1] The Shallow Pervious Zone groundwater is discontinuous in the area of the NWLF/CAMU and is first encountered at approximately 5 feet bgs. The Deep Pervious groundwater is the first continuous pervious zone encountered below the NWLF/CAMU. Therefore, the point of compliance for the NWLF/CAMU has been established at the Deep Pervious Zone.

Table VI-B
Block 80 HWLF Groundwater Monitoring Parameters

Parameters	Container Type	Preservation Method	Analytical Method[2]	Concentration Limit[3] (ug/L)
pH[1], Specific Conductivity[1], and Turbidity[1]	Glass/Plastic	Field Measure	N/A	N/A
Antimony	Glass/Plastic	HNO_3 and Cool to 4°C	6010	Background[4]
Barium	Glass/Plastic	HNO_3 and Cool to 4°C	6010	Background[4]
Cadmium	Glass/Plastic	HNO_3 and Cool to 4°C	6010	Background[4]
Chromium	Glass/Plastic	HNO_3 and Cool to 4°C	6010	Background[4]
Copper	Glass/Plastic	HNO_3 and Cool to 4°C	6010	Background[4]
Iron	Glass/Plastic	HNO_3 and Cool to 4°C	6010	Background[4]
Lead	Glass/Plastic	HNO_3 and Cool to 4°C	6010	Background[4]
Selenium	Glass/Plastic	HNO_3 and Cool to 4°C	6010	Background[4]
Zinc	Glass/Plastic	HNO_3 and Cool to 4°C	6010	Background[4]

[1] These are groundwater quality parameters; there are no Concentration Limits associated with these parameters.

[2] The most current version of the required SW-846 Method will be utilized.

[3] Statistically significant concentrations that suggest a release has occurred from the regulated unit.

[4] Any concentrations of naturally occurring parameters (e.g., metals, etc.) which exceed background concentrations will be considered an exceedance of the Concentration Limits.

Table VI-C
NWLF/CAMU Groundwater Monitoring Parameters

Parameter	Container Type	Preservation Method	Analytical Method[1]	Concentration Limit[3] (ug/L)
pH[1], Specific Conductivity[1], and Turbidity[1]	Glass/Plastic	Field Measure	N/A	N/A
Chromium	Glass/Plastic	HNO_3 and Cool to 4°C	6010	Background[4]
Mercury	Glass/Plastic	HNO_3 and Cool to 4°C	7470	Background[4]
Base Neutrals [5]	Amber Glass, Teflon-lined cap	Cool to 4°C	8270	MDL[6]
Volatile Organic Compounds (VOCs)	VOC Vials	Cool to 4°C	8260	MDL[6]

[1] These are groundwater quality parameters; there are no Concentration Limit associated with these parameters.

[2] The most current version of the required SW-846 Method will be utilized.

[3] Statistically significant concentrations that suggest a release has occurred from the regulated unit.

[4] Any concentrations of naturally occurring parameters (e.g., metals, etc.) which exceed background concentrations will be considered an exceedance of the concentration limits.

[5] Base Neutrals are a subset of the semi-volatile organic compound (SVOC) analysis.

[6] The Method Detection Limit (MDL), established in "Test Methods for Evaluating Solid Waste Physical/Chemical Methods, 3rd Ed." (EPA Publication Number SW-846, 1986, as amended), or Administrative Authority approved equivalent, shall serve as the concentration limit, unless changed through permit modification(s) by the Administrative Authority. MDL denotes maximum permissible U.S. EPA quoted Method Detection Limit.

Table VI-D
NWLF/CAMU Leak Detection Wells and Leachate Recovery Trench Groundwater Monitoring Parameters[1]

Parameter	Container Type	Preservation Method	Analytical Method[2]
pH[3], Specific Conductivity[3], and Turbidity[3]	Glass/Plastic	Field Measure	N/A
Base Neutrals[4]	Amber Glass, Teflon-lined cap	Cool to 4°C	8270
Volatile Organic Compounds (VOCs)	VOC Vials	Cool to 4°C	8260

[1] The NWLF/CAMU Leak Detection Wells and Leachate Recovery Trench are located in the Shallow Pervious Zone (the POC is located in the Deep Pervious Zone) and, therefore, detection monitoring concentration limits do not apply. However, the Permittee shall continue to operate and maintain the NWLF/CAMU Leak Detection Wells and Leachate Recovery Trench until the termination of corrective action activities associated with the aforementioned systems is approved by the Administrative Authority. The Permittee shall continue to report the analytical results for groundwater and leachate sampled from the NWLF/CAMU Leak Detection Wells and Leachate Recovery Trench in the Semi-Annual and Annual Groundwater Monitoring Reports.

[2] The most current version of the required SW-846 Method will be utilized.

[3] The sampling and analysis of these parameters applies only to the leak detection wells. The sampling and analysis of these parameters does not apply to leachate recovered from the leachate recovery trench.

[4] Base Neutrals are a subset of the semi-volatile organic compound (SVOC) analysis.

VI.F. COMPLIANCE PERIOD

In the event the Permittee is required to establish a groundwater protection standard associated with a Compliance Monitoring Program/Corrective Action Program for a regulated unit, a compliance period shall be established in accordance with LAC 33:V.3313.

VI.G. GENERAL REQUIREMENTS

VI.G.1. The Permittee's groundwater monitoring system for the previously identified hazardous waste management facilities must consist of all wells as listed in Table VI-A, unless changed in the future by the Administrative Authority through permit modification.

VI.G.2. The Permittee must maintain the structural and mechanical integrity of all wells and provide protection from accidental damage and surface infiltration, as well as implement a monitoring well inspection schedule. A written report on damage to any well must be submitted to the Administrative Authority in accordance with Condition II.E.22 of this permit.

VI.G.3. Upgradient wells must always yield groundwater samples from the uppermost water-bearing zone that are representative of groundwater that has not been affected by possible leakage from the waste management units. Downgradient and vertical point of compliance wells must yield groundwater samples from the water-bearing zones that represent the quality of groundwater beneath the facilities that flows to the point of compliance.

VI.G.4. The Permittee must conform to the latest approved Groundwater Detection Monitoring Plan referenced in Attachment 1.

VI.G.5. Each well must be measured for total depth and depth to water on the same day and prior to purging. Measurements must be to the nearest 0.1 foot, and the values must be recorded in the field notebook and reproduced and submitted in the Semi-Annual and Annual Groundwater Monitoring Reports. If 10% of the screened interval is blocked by sediments, the well must be redeveloped prior to the next required sampling event.

VI.G.6. Each well must be purged by evacuation to dryness or by removing a minimum of three casing volumes. The wells must be sampled immediately upon purging and/or when sufficient water for sampling has recharged the well. Other techniques (e.g., micro-purging) must be approved by the Administrative Authority prior to use in monitoring or corrective action programs. Purging methods must be consistent throughout the life of the permitted closed unit.

VI.G.7. Samples must be withdrawn using dedicated or adequately cleaned equipment for each well. No equipment or method may be used that will chemically

alter or influence the sample. Sampling devices other than bailers must be approved by the Administrative Authority prior to use in monitoring or corrective action programs. Care must be taken to avoid placing clean sampling equipment on the ground or on any contaminated surface. Sampling methods and equipment must be compatible throughout the life of the permitted closed unit.

VI.G.8. Groundwater samples shall be monitored and analyzed for turbidity. Samples containing less than five (5) NTU (nephelometric turbidity unit) are acceptable for analysis when the analytical method is sensitive to turbidity (such as the analysis of metals). Samples containing greater than five (5) NTU are only acceptable when well development is certified by a qualified geologist as "the best obtainable". An evaluation of turbidity must accompany all potentially affected analytical values.

VI.G.9. The Permittee must measure pH and specific conductance as standard indicators of groundwater contamination, which will be used to indicate well integrity and possible groundwater contamination. The results of these analyses must be recorded in the field log book and interpreted.

VI.G.10. A chain of custody protocol must be employed that will allow for tracking possession and handling of samples from the time of collection through laboratory analysis. All sample containers must be labeled to prevent misidentification, have proper seals, and indicate the test parameters required.

VI.G.11. Sample preservation, handling and analysis must meet the specifications of LAC 33:V.3315.D and E and Test Methods for Evaluating Solid Waste Physical/Chemical Methods 3rd. Edition (EPA Publication Number SW-846, as amended) or an equivalent substitute (approved by the Administrative Authority prior to implementation). Containers, preservation methods and analytical limits are listed in Tables VI-B, VI-C, and VI-D of this permit.

VI.G.12. The Permittee must use one of the statistical procedures outlined in the most current approved facility Groundwater Detection Monitoring Plan or LAC 33:V.3315.H in determining whether background values or concentrations have been exceeded for the hazardous constituents specified in Tables VI-B and VI-C of this permit.

VI.G.13. Records of all sampling and analytical work must be maintained at the site during the life of the facilities, including post-closure care periods. An up-to-date field log book (or compilation of field sheets) must be kept at the site which documents (for each sample) the well identification number, total well depth, elevation of top of casing, water level, water color (visual), well evacuation procedures and equipment, sample withdrawal procedures and equipment, date, time sample identification numbers, field measurements (pH, specific conductance, etc.) and methods, name of collector, field observations, calculations of the standing water volume in the well, and the total volume evacuated.

VI.H. DETECTION MONITORING PROGRAM

A Detection Monitoring Program is required whenever hazardous constituents have NOT been detected at the point of compliance for a regulated unit. The Permittee must continue or expand the Detection Monitoring Program in accordance with the requirements of LAC 33:V.3317 and as subsequently directed by the Administrative Authority until one of the following occurs: 1) a Compliance Monitoring Program and/or Corrective Action Program is required and the permit is modified accordingly; or 2) the post-closure monitoring period has ended for the regulated unit.

VI.H.1. The Permittee must utilize the groundwater monitoring system outlined in Conditions VI.B and VI.D and as required by LAC 33:V.3315 to monitor for indicator parameters (i.e., pH, specific conductance, and turbidity), waste constituents, or reaction products that provide a reliable indication of the presence of hazardous constituents.

VI.H.2. The Permittee shall sample the groundwater monitoring system according to the schedule specified in Table VI-A and the Groundwater Detection Monitoring Plan.

VI.H.3. The Permittee must determine whether there is statistically significant evidence of contamination for any indicator parameter or hazardous constituent specified in Condition VI.D. Statistical methods shall conform to Condition VI.G.12.

VI.H.4. Within forty-five (45) days after the sampling event, the Permittee shall have complete analytical results and shall have determined whether there is statistically significant evidence of contamination for any indicator parameter or hazardous constituent. In doing so, the Permittee shall compile a report containing the test results, the statistical comparative data, groundwater potentiometric maps, graphs, and copies of the field log book notes and chain of custody where appropriate. This information shall be maintained at the site as provided in Condition VI.G.13, except that statistically significant evidence of contamination must be forwarded for review by the Administrative Authority in accordance with Condition VI.H.5. Other reporting requirements shall be in accordance with Condition VI.M.

VI.H.5. If the Permittee determines that there is statistically significant evidence of contamination for indicator parameters or hazardous constituents at any point of compliance well, the Permittee must do the following:

VI.H.5.a. Notify the Administrative Authority of this finding in writing within seven (7) days. This notification must indicate what indicator parameters or hazardous constituents have shown statistically significant evidence of contamination.

VI.H.5.b. Immediately sample the groundwater in all point of compliance wells and determine whether constituents listed in LAC 33:V.3325, Table 4 are present, and if so, in what concentrations. This sampling shall be conducted within seven (7) days of the determination that there is statistically significant evidence of contamination, unless written approval of a different timeframe is given by the Administrative Authority. Within forty-five (45) days after the sampling event, the Permittee shall submit a report to the Administrative Authority detailing whether there is statistically significant evidence of contamination for any constituent, and should indicate whether the Permittee intends on resampling for any of the constituents pursuant to Condition VI.H.5.c. The report shall contain the test results, the statistical comparative data, groundwater potentiometric maps, graphs, and copies of the field log book notes and chain of custody where appropriate.

VI.H.5.c. For any LAC 33:V.3325, Table 4 constituent found in the analysis pursuant to Condition VI.H.5.b above, the Permittee may resample within one month of the report submittal to the Administrative Authority and repeat the analysis for those constituents detected. Within forty-five (45) days after the sampling event, the Permittee shall submit a report to the Administrative Authority detailing whether there is statistically significant evidence of contamination for any constituent. The report shall contain the test results, the statistical comparative data, groundwater potentiometric maps, graphs, and copies of the field log book notes and chain of custody where appropriate.

VI.H.5.c.(1). If the results of the second analysis confirm the initial results, then these constituents will form the basis for compliance monitoring.

VI.H.5.c.(2). If the Permittee does not resample for the constituents found pursuant to Condition VI.H.5.b above, the constituents found during this initial analysis will form the basis for compliance monitoring.

VI.H.5.d. Submit to the Administrative Authority within ninety (90) days an application for a permit modification to establish a Compliance Monitoring Program. The application must include:

VI.H.5.d.(1). An identification of the concentration of any LAC 33:V. 3325, Table 4 constituent detected in the groundwater at each point of compliance well;

VI.H.5.d.(2). Any proposed changes to the groundwater monitoring system necessary to meet the requirements of a Compliance Monitoring Program (LAC 33:V.3319) which shall also include the requirements for assessment;

VI.H.5.d.(3). Any proposed additions or changes to the monitoring frequency, sampling and analysis procedures or methods, or statistical methods necessary to meet the requirements of a Compliance Monitoring Program (LAC 33:V.3319); and

VI.H.5.d.(4). For each hazardous constituent detected (as defined in LAC 33:V.3301.A.1) at the point of compliance, a proposed concentration limit under LAC 33:V.3309, or a notice of intent to seek an alternate concentration limit under LAC 33.V.3309.B. (All data necessary to justify an alternate concentration limit sought under LAC 33:V.3309.B must be submitted by the Permittee to the Administrative Authority within 180 days from the date of the confirmation of contamination).

VI.H.5.e. Submit to the Administrative Authority within 180 days an Engineering Feasibility Plan for a Corrective Action Program necessary to meet the requirement of LAC 33:V.3321. The plan will not be required if:

VI.H.5.e.(1). all hazardous constituents identified under Condition VI.H.5.b are listed in LAC 33:V.3309.A.3, Table 1, and their concentrations do not exceed the respective values given in that table; or

VI.H.5.e.(2). the Permittee has sought an alternate concentration limit under LAC 33:V.3309.B for every hazardous constituent identified under Condition VI.H.5.b.

VI.H.5.f. If the Permittee determines that there is a statistically significant difference for indicator parameters or hazardous constituents at any point of compliance well identified under Condition VI.H.3, the Permittee may demonstrate that a source other than a regulated unit caused the contamination or that the detection is an artifact caused by an error in sampling, analysis, or statistical evaluation or natural variation in the groundwater. The Permittee may make a demonstration under this Condition in addition to, or in lieu of, submitting a permit modification application; however, the Permittee is not relieved of the requirement to submit a permit modification application within the time specified in Condition VI.H.5.d unless the demonstration made under this Condition successfully shows that a source other than a regulated unit caused the increase, or that the increase resulted from error in sampling, analysis, or evaluation. In making a demonstration under this Condition the Permittee must:

VI.H.5.f.(1). Notify the Administrative Authority in writing within seven (7) days of determining statistically significant evidence of contamination that the Permittee intends to make a demonstration under this Condition;

VI.H.5.f.(2). Within ninety (90) days, submit a report to the Administrative Authority that demonstrates that a source other than a regulated unit caused the contamination or that the contamination resulted from error in sampling, analysis, or evaluation;

VI.H.5.f.(3). Within ninety (90) days, submit to the Administrative Authority a permit modification application to make any appropriate changes to the Detection Monitoring Program; and

VI.H.5.f.(4). Continue to monitor in accordance with the established Detection Monitoring Program.

VI.H.6. If the Permittee determines that the Detection Monitoring Program no longer satisfies the requirements of this permit, the Permittee, within ninety (90) days, shall submit an application for a permit modification to make any appropriate changes to the program. Any time the Administrative Authority determines that the Detection Monitoring Program does not satisfy the requirements of this permit, the Permittee shall, within 90 days of notification of such determination, submit an application for a permit modification to make any appropriate changes to the program.

VI.I. LEAK DETECTION MONITORING

VI.I.1. The Permittee must maintain and operate the Leak Detection Monitoring system associated with the NWLF/CAMU.

VI.I.2. The Permittee must sample and analyze groundwater and leachate from the leak detection wells referenced in Table VI-A for the monitoring parameters specified in Table VI-D in accordance with the approved Groundwater Detection Monitoring Plan referenced in Attachment 1.

VI.I.3. The Permittee must maintain and operate the NWLF/CAMU Groundwater Recovery and Contaminant Extraction System in accordance with the approved NWLF Corrective Action Plan (note: the NWLF Corrective Action Plan was approved prior to the units designation as a CAMU).

VI.J. COMPLIANCE MONITORING

(RESERVED). Permittee currently in the Detection Monitoring Program as per Condition VI.H.

VI.K. CORRECTIVE ACTION PROGRAM

(RESERVED) Permittee currently in the Detection Monitoring Program as per Condition VI.H.

VI.L. CONSTRUCTION AND ABANDONMENT OF MONITORING WELLS AND GEOTECHNICAL BOREHOLES

The construction and abandonment of groundwater monitoring wells must conform to the standards and guidelines specified in the latest version of the "CONSTRUCTION OF GEOTECHNICAL BOREHOLES AND GROUNDWATER MONITORING SYSTEMS HANDBOOK". This document is printed by and available from the Louisiana Department of Transportation and Development (DOTD), Water Resources Section, P.O. Box 94245, Baton Rouge, Louisiana 70804 9245. The document is also available online at http://www.dotd.state.la.us/intermodal/wells/wellhandbook.com.

A work plan for the construction of a new well must be submitted to the Administrative Authority for approval as the entire groundwater monitoring system must be approved. Any required new well should be installed within thirty (30) days of approval of the work plan by the Administrative Authority. Upon completion of new or replacement well, a copy of DOTD GW 1 S, DOTD Well Registration Short Form, is to be provided to the Administrative Authority.

The Permittee must provide for the sealing of any vertical migration path resulting from exploratory boring, leachate collection or detection systems and/or groundwater monitoring programs as provided in LAC 33:V.3323. A work plan for the plugging and abandonment of a well must be submitted for approval by the Administrative Authority, whenever such migration pathways are discovered. Upon completion of well abandonment, a copy of DOTD GW 2, DOTD Well Plugging and Abandonment Form, is to be provided to the Administrative Authority.

VI.M. REPORTING AND NOTIFICATION REQUIRMENTS

VI.M.1. Semi-Annual Groundwater Report

The Permittee shall submit a Semi-Annual Groundwater Report by September 1st of each year. The report shall include the following:

VI.M.1.a. a table showing well number, well depth, interval screened, zone monitored, well diameter, screen and casing material (and the type of pump, if applicable) for all wells;

VI.M.1.b. a facility map showing all wells (e.g., up-gradient, point of compliance, assessment, plume defining and monitored attenuation) and identifying zones in which wells are screened;

VI.M.1.c. a scaled potentiometric surface showing well locations, groundwater elevations with respect to mean sea level for each monitored zone;

VI.M.1.d. all analytical data, including QA/QC;

VI.M.1.e. a summary of all analytical data;

VI.M.1.f. a statistical method shall be used in evaluating data for each hazardous constituent, as approved by the Administrative Authority;

VI.M.1.g. graphical representation of those parameters with MCLs specified in Table VI-B and VI-C for each sampling event. The graphical representation must include:

VI.M.1.g.(1). contaminant concentration isopleth maps;

VI.M.1.g.(2). contaminant concentration versus time graphs;

VI.M.1.h. a discussion of any significant changes in the data from the last reporting period;

VI.M.1.i. a discussion of the down time for any well or part of the system and actions taken to return the system to normal operations and maximum efficiency; and

VI.M.1.j. evaluation of the effectiveness and progress of any corrective action associated with the permitted unit.

VI.M.2. Annual Groundwater Report

An Annual Groundwater Report must be submitted each year no later than March 1, as required by LAC 33:V.1529.D.8. This report must summarize all groundwater activities for the preceding calendar year including an evaluation of the monitoring strategy in relation to the direction of groundwater flow and locations of wells associated with the facilities. Applicable calculations must also include groundwater flow contaminant migration rates (as applicable), statistical comparisons, and any other information as it regards corrective action required by this permit. The report shall also include the second Semi-Annual Groundwater Monitoring Report as specified in Condition VI.M.1.

VI.M.3. Notification of Statistically Significant Evidence of Contamination

The Permittee must notify the Administrative Authority in accordance with Conditions VI.H when there is statistically significant evidence of contamination for chemical parameters or hazardous constituents.

VI.M.4. Notification of Release to SPOC

In the event of a release in, into, within, or on any groundwaters of the state, (i.e., any confirmation of contamination in any previously uncontaminated saturated subsurface

strata) the Permittee must notify the Department within twenty-four (24) hours of confirming statistically significant evidence of a release. Notification shall be made to the Office of Environmental Compliance, Emergency and Radiological Services Division, Single Point of Contact (SPOC) in accordance with LAC 33:309.L.7 and Condition II.E.18 of this permit. This requirement is in addition to notification requirements to the Administrative Authority discussed in Conditions VI.H.

HAZARDOUS AND SOLID WASTE AMENDMENTS

VII. GENERAL CONDITIONS PURSUANT TO THE HAZARDOUS AND SOLID WASTE AMENDMENTS

VII.A. STANDARD CONDITIONS

VII.A.1. Waste Minimization

Annually, by March 1, for the previous year ending December 31, the Permittee shall enter into the operating record as required by LAC 33:V.1529.B.19, a statement certified according to LAC 33:V.513.A specifying that the Permittee has a program in place to reduce the volume and toxicity of hazardous wastes generated by the facility's operation to the degree determined by the Permittee to be economically practicable; and that the proposed method of treatment, storage, or practicable disposal method that is currently available to the Permittee minimizes the present and future threat to human health and the environment. A current description of the program shall be maintained in the operating record and a copy of the annual certified statement shall be submitted to the Administrative Authority. The following criteria should be considered for the program:

VII.A.1.a. Any written policy or statement that outlines goals, objectives, and/or methods for source reduction and recycling of hazardous waste at the facility;

VII.A.1.b. Any employee training or incentive programs designed to identify and implement source reduction and recycling opportunities;

VII.A.1.c. An itemized list of the dollar amounts of capital expenditures (plant and equipment) and operating costs devoted to source reduction and recycling of hazardous waste;

VII.A.1.d. Factors that have prevented implementation of source reduction and/or recycling;

VII.A.1.e. Sources of information on source reduction and/or recycling received at the facility (e.g., local government, trade associations, suppliers, etc.);

VII.A.1.f. An investigation of additional waste minimization efforts that could be implemented at the facility. This investigation would analyze the potential for reducing the quantity and toxicity of each waste stream through production reformulation, recycling, and all other appropriate means. The analysis would include an assessment of the technical feasibility, cost, and potential waste reduction for each option;

VII.A.1.g. A flow chart or matrix detailing all hazardous wastes the facility produces by quantity, type, and building/area;

VII.A.1.h. A demonstration of the need to use those processes that produce a particular hazardous waste due to a lack of alternative processes or available technology that would produce less hazardous waste;

VII.A.1.i. A description of the waste minimization methodology employed for each related process at the facility. The description should show whether source reduction or recycling is being employed;

VII.A.1.j. A description of the changes in volume and toxicity of waste actually achieved during the year in comparison to previous years; and

VII.A.1.k. The Permittee may meet the requirements for waste minimization by developing an Environmental Management System according to the EPA document, Integrated Environmental Management System Implementation Guide, EPA 744-R-00-011, October 2000, found on the EPA website at www.epa.gov/opptintr/dfe/pubs/iems/iems_guide/index.htm.

VII.A.2. Dust Suppression

Pursuant to LAC 33:V.4139.B.4, and the Toxic Substances Control Act, the Permittee shall not use waste or used oil or any other material which is contaminated with dioxin, polychlorinated biphenyls (PCBs), or any other hazardous waste (other than a waste identified solely on the basis of ignitability), for dust suppression or road treatment.

VII.A.3. Failure to Disclose

The Permittee's failure in the application or during the permit issuance process to disclose fully all relevant facts at any time may be cause for termination or modification of this Permit in accordance with LAC 33:323.B.2 and 3.

VII.A.4. Suspension, Modification, or Revocation and Reissuance, and Termination of Permit

This Permit may be modified, revoked and reissued, or terminated for cause as specified in LAC 33:V.323. The filing of a request by the Permittee for a permit modification, revocation and reissuance, termination, or the notification of planned changes or anticipated noncompliance on the part of the Permittee, does not stay the applicability or enforceability of any permit condition.

VII.A.4.a. If the Administrative Authority tentatively decides to modify or revoke and reissue a permit under LAC 33:V.321.C. or 323, a draft permit shall be prepared incorporating the proposed changes. The Administrative Authority may request additional information and, in the case of a modified permit, may require the submission of an updated permit application.

VII.A.4.b. The Permittee may initiate permit modification proceedings under LAC 33:V.321.C. All applicable requirements and procedures as specified in LAC 33:V.321.C shall be followed.

VII.A.4.c. Modifications of this Permit do not constitute a reissuance of the Permit.

VII.A.5. Permit Review

This Permit may be reviewed by the Administrative Authority five years after the date of permit issuance and may be modified as necessary as provided for in LAC 33:V.321.C. Nothing in this section shall preclude the Administrative Authority from reviewing and modifying the Permit at any time during its term.

VII.A.6. Compliance with Permit

Compliance with a RCRA permit during its term constitutes compliance, for purposes of enforcement, with subtitle C of RCRA except for those requirements not included in the permit which:

VII.A.6.a. Become effective by statute;

VII.A.6.b. Are promulgated under LAC 33:V.Chapter 22 restricting the placement of hazardous wastes in or on the land; or

VII.A.6.c. Are promulgated under LAC 33:V.Chapters 23, 25 and 29 regarding leak detection systems for new and replacement surface impoundment, waste pile, and landfill units, and lateral expansions of surface impoundment, waste pile, and landfill units. The leak detection system requirements include double liners, construction quality assurance (CQA) programs, monitoring action leakage rates, and response action plans, and will be implemented through the procedures of LAC 33:V.321.C Class 1 permit modifications.

VII.A.7. Specific Waste Ban

VII.A.7.a. The Permittee shall not place in any land disposal unit the wastes specified in LAC 33:V. Chapter 22 after the effective date of the prohibition unless the Administrative Authority has established disposal or treatment standards for the hazardous waste and the Permittee meets such standards and other applicable conditions of this Permit.

VII.A.7.b. The Permittee may store wastes restricted under LAC 33:V.Chapter 22 solely for the purpose of accumulating quantities necessary to facilitate proper recovery, treatment, or disposal provided that it meets the requirements of LAC 33:V.2205 including, but not limited to, clearly marking each tank or container.

VII.A.7.c. The Permittee is required to comply with all applicable requirements of LAC 33:V.2245 as amended. Changes to the Waste Analysis Plan will be considered permit modifications at the request of the Permittee, pursuant to LAC 33:V.321.C.

VII.A.7.d. The Permittee shall review the waste analysis plan and analyze the waste when a process changes to determine whether the waste meets applicable treatment standards. Results shall be maintained in the operating record pursuant to Condition III.C.1 and 2.

VII.A.8. Information Submittal for the Corrective Action Strategy

Failure to comply with any condition of the Permit, including information submittals, constitutes a violation of the Permit and is grounds for enforcement action, permit amendment, termination, revocation, suspension, or denial of permit renewal application. Falsification of any submitted information is grounds for termination of this Permit (LAC 33:V.323.B.3).

The Permittee shall ensure that all plans, reports, notifications, and other submissions to the Administrative Authority required by this Permit using the Corrective Action Strategy are signed and certified in accordance with LAC 33:V.Chapter 5, Subchapter B. All submittals required under the corrective action strategy must conform to those requirements outlined in the RECAP (see Condition VIII of this permit). Variance from content and/or formatting guidelines provided under the RECAP shall be requested by the Permittee prior to submittal to the Administrative Authority, as deemed necessary. Approval or disapproval of such a request with further guidance on content and formatting will be provided by the Administrative Authority, as deemed necessary. Five (5) copies each of these plans, reports, notifications or other submissions and one (1) electronic copy (3.5" IBM compatible disk or CD-ROM) of all portions thereof which are in word processing format shall be submitted to the Administrative Authority by Certified Mail or hand delivered to:

Louisiana Department of Environmental Quality
Office of Environmental Assessment
Environmental Technology Division
P.O. Box 4314
Baton Rouge, LA 70821-4314

A summary of the planned reporting milestones pursuant to the corrective action requirements of this Permit is found in Condition VIII, Table 1.

VII.A.9. Data Retention

All raw data, such as laboratory reports, drilling logs, bench-scale or pilot-scale data, and other supporting information gathered or generated during activities undertaken pursuant to this Permit shall be maintained at the facility during the term of this Permit, including any reissued Permits.

VII.A.10. Management of Wastes

All solid wastes which are managed pursuant to a remedial measure taken under the corrective action process or as an interim measure addressing a release or the threat of a release from a solid waste management unit shall be managed in a manner protective of human health and the environment and in compliance with all applicable Federal, State and local requirements. As a response to the Louisiana legislature mandate La. R.S. 30:2272 (Act 1092 of the 1995 Regular Session) to develop minimum remediation standards, the LDEQ promulgated the Risk Evaluation Corrective Action Program (RECAP). RECAP's tiered approach to risk evaluation and corrective action establishes not only across the board numerical standards for most media, but also allows for the development of more site-specific numerical standards, as warranted. The Permittee is required to comply with all applicable requirements of RECAP. Approval of units for managing wastes and conditions for operating the units shall be granted through the permitting process.

VII.B. EMISSION STANDARDS - PROCESS VENTS, EQUIPMENT LEAKS, TANKS, SURFACE IMPOUNDMENTS, AND CONTAINERS (AA-BB-CC AIR REGULATIONS)

VII.B.1. Performance Standards for Equipment Leaks

VII.B.1.a. Operating Requirements

The Permittee shall comply with the applicable requirements under LAC 33:V. Chapter 17 Subchapter B – Equipment Leaks – for all equipment associated with operations that treat, store, or dispose of hazardous waste with organic concentrations equal to or greater than 10 percent by weight.

VII.B.1.b. Monitoring Requirements

The Permittee shall monitor the following equipment for proper operation: pumps in light service, LAC 33:V.1719.A; compressors, LAC 33:V.1721; pressure relief devices in gas/vapor service, LAC 33:V.1723; open-ended valves or lines, LAC 33:V.1727; valves in gas/vapor service or in light liquid service, LAC 33:V.1737; and pumps and valves in heavy liquid service, pressure relief devices in light liquid or heavy liquid service, and flanges and other connectors, LAC 33:V.1731.

VII.B.1.c. Recordkeeping Requirements

The Permittee shall maintain an up-to-date list identifying each piece of equipment to which LAC 33:V.Chapter 17.Subchapter B applies, and record all information required by LAC 33:V.1743.

VII.B.1.d. Reporting Requirements

A semiannual report shall be submitted to the Administrative Authority in accordance with the requirements of LAC 33:V.1745, based on the date of submittal of the annual report for the facility. A report is not required for a 6-month period during which all devices listed in Condition VII.B.1.b are operated such that during no period of twenty four (24) hours or longer did the devices operate continuously in noncompliance with the applicable operating conditions defined in LAC 33:V.Chapter 17.Subchapter B.

VII.B.2. Performance Standards for Tanks, Surface Impoundments, and Containers

VII.B.2.a. Operating Requirements

VII.B.2.a.(1). The Permittee shall comply with the applicable requirements of LAC 33:V. Chapter 17, Subchapter C.

VII.B.2.a.(2). The Permittee shall install and maintain all regulated units and associated emission control technology in accordance with the detailed plans, schedules, information, and reports as contained in the Part B Permit Application.

VII.B.2.a.(3). The Permittee shall, upon request, identify all less than 90-day accumulation tanks or containers, which contain or contact hazardous wastes with organic concentrations equal to or greater than 10 percent by weight and identify the emission control system requirements under LAC 33:V.1703 to 1715.

VII.B.2.b. Monitoring Requirements

VII.B.2.b.(1). The pollution control methods used for tanks shall be inspected on a periodic basis.

VII.B.2.b.(2). Tanks meeting Level 1 controls shall be inspected at least once every year, LAC 33:V.1755.C.4.

VII.B.2.b.(3). Tanks meeting Level 2 controls shall be inspected in accordance with LAC 33:V.1755.E.3 for internal floating roofs, LAC 33:V.1755.F.3 for external floating roofs, LAC 33:V.1755.G.3 for air emission control equipment, and LAC 33.V.1755.I.4 for closed vent control systems.

VII.B.2.b.(4). The pollution control methods used for containers shall be inspected according to the applicable inspection frequency.

VII.B.2.b.(5). Level 1 controls shall be inspected in accordance with LAC 33:V.1759.C.4.

VII.B.2.b.(6). Level 2 controls shall be inspected in accordance with LAC 33:V.1759.D.4.

VII.B.2.b.(7). Level 3 controls shall be inspected in accordance with LAC 33:V.1759.E.4.

VII.B.2.c. Recordkeeping Requirements

Air emission control design documentation shall be maintained in the facility operating record until the equipment is no longer in service. Records must be prepared and maintained for the various equipment and systems used at the facility.

VII.B.2.c.(1). Tanks using air emission control records must meet LAC 33:V.1765.B requirements.

VII.B.2.c.(2). Container storage areas using Level 3 controls must meet LAC 33:V.1765.D requirements.

VII.B.2.c.(3). Closed-vent system and control device systems meeting LAC 33:V.1761 must meet LAC 33:V.1765.E requirements.

VII.B.2.c.(4). Facilities exempted by LAC 33:V.1751.C must meet LAC 33:V.1765.F requirements.

VII.B.2.c.(5). Components identified as "unsafe to inspect and monitor" in accordance with LAC 33:V.1755.L and 1757.G must meet LAC 33:V.1765.G requirements.

VII.B.2.c.(6). Facilities that are governed by this Chapter and use alternate control systems meeting the emission control standards of 40 CFR 60, Subpart VV or 40 CFR 61, Subpart V must meet LAC 33:V.1765.H requirements.

VII.B.2.c.(7). All tanks or containers not using air emission controls in accordance with LAC 33:V.1747.D must meet LAC 33:V.1765.I requirements.

VII.B.2.d. Reporting Requirements

VII.B.2.d.(1). For each tank, surface impoundment, or container which manages hazardous waste that is exempted from using air emission controls, a written report shall be submitted to the Administrative Authority within fifteen (15) days of each occurrence

when hazardous waste is placed in the waste management unit in noncompliance with the conditions of LAC 33:V.1751.C, as applicable. The written report shall contain the EPA identification number, facility name and address, a description of the noncompliance event and the cause, the dates of the noncompliance, and the actions taken to correct the noncompliance and prevent reoccurrence of the noncompliance.

VII.B.2.d.(2). For control devices used in accordance with the requirements of LAC 33:V.1735, a semiannual written report shall be submitted to the Administrative Authority, based on the date of submittal of the annual report, except as provided for in noncompliance situations. The report shall describe each occurrence during the previous six (6)-month period when a control device is operated continuously for twenty-four (24) hours or longer in noncompliance with the applicable operating values defined in LAC 33:V.1713.C.4 or when a flare is operated with visible emissions as defined in LAC 33:V.1707.D. The written report shall include the EPA identification number, facility name and address, an explanation why the control device could not be returned to compliance within 24 hours, and actions taken to correct the noncompliance.

VII.B.2.d.(3). The report to the Administrative Authority in accordance with the requirements of VII.B.2.d.(1) and (2). above is not required for a six (6)-month period during which all control devices subject to LAC 33:V, Subchapter C are operated such that during no period of twenty-four (24) hour or longer did control devices operate continuously in noncompliance with the applicable operating values defined in LAC 33:V.1713.C.4 or a flare operate with visible emissions as defined in LAC 33:V.1707.D.

VII.B.2.d.(4). All reports shall be signed and dated by an authorized representative of the Permittee as per LAC 33:V.507.

VII.C. SPECIFIC CONDITION - CLOSURE

Pursuant to Section 3005(j)(1) of the Hazardous and Solid Waste Amendments of 1984, the Permittee shall close any closing units in accordance with the following provisions:

VII.C.1. Other than consolidation of any wastes from the sites in conformance with LAC 33:V.Chapter 22, Land Disposal Restrictions, the Permittee shall not place waste prohibited by LAC 33:V.Chapter 22 into any closing units;

VII.C.2. The Permittee shall perform unit closures in accordance with the Closure Plan(s) as approved at the time of closure, and which meet(s) all relevant State and Federal closure requirements at the time of closure; and

VII.C.3. The Permittee shall notify the Administrative Authority in writing at least sixty (60) days prior to commencement of closure.

VIII. SPECIAL CONDITIONS PURSUANT TO HAZARDOUS AND SOLID WASTE AMENDMENTS—CORRECTIVE ACTION STRATEGY

Corrective Action for Releases: Section 3004(u) of RCRA, as amended by the Hazardous and Solid Waste Amendments (HSWA), and LAC 33:V.3322 require that permits issued after November 8, 1984, address corrective action for releases of hazardous waste or hazardous constituents from any solid waste management unit at the facility, regardless of when the waste was placed in the unit.

EPA's traditional RCRA corrective action approach is structured around several elements common to most activities. In the first phase, RCRA facility assessment (RFA), EPA or the authorized state assesses the facility to identify releases and determine the need for corrective action. In the second phase, RCRA facility investigation (RFI), the facility conducts a more detailed investigation to determine the nature and extent of contaminants released to groundwater, surface water, air, and soil. If remedial action is needed, a third phase, corrective measures study (CMS), is started. During this phase, the facility conducts a study, which when completed, describes the advantages, disadvantages, and costs of various cleanup options. After selection of a final remedy, the fourth phase, corrective measures implementation (CMI), is initiated. The facility is required to design, construct, operate, maintain, and monitor the final remedy(s).

The Corrective Action Strategy (CAS) is an alternate corrective action approach that can be implemented during any phase of corrective action for a "release area" resulting from a release or releases from a facility. The Permittee shall use the CAS approach as the framework for corrective action to clarify, facilitate and expedite the process, and shall use the **Louisiana Department of Environmental Quality Risk Evaluation/Corrective Action Program (RECAP)** for screening and media-specific cleanup standards. EPA has interpreted the term "release" to mean, "any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment." (50 FR 2873, July 15, 1985). The CAS refers to "release areas" as solid waste management units (SWMUs) and areas of concern (AOCs) while the RECAP refers to release areas as areas of investigation (AOIs). SWMUs and AOCs may also be referred to as "AOIs" when investigated and managed under the RECAP.

The Groundwater Corrective Action Agreement entered into by and between the Louisiana Department of Environmental Quality and The Dow Chemical Company on or about March 20, 1991, following public notice on June 13 and 14, 1990 and public review and comment thereafter (the "Groundwater Corrective Action Agreement") is recognized as an integral and key part of the facility's CAS. Notwithstanding anything to the contrary stated herein, any releases of hazardous waste or hazardous constituents or other constituents, including those from or in connection with any SWMU, release area, AOC, or AOI, that are subject to the Groundwater Corrective Action Agreement shall continue to be governed by and subject to the Groundwater Corrective Action Agreement. The aforementioned Groundwater Corrective Action Agreement is incorporated by reference into this permit as noted in Attachment 1 of this permit.

VIII.A. ALTERNATE CORRECTIVE ACTION

VIII.A.1. Introduction to CAS

This Permit will utilize the CAS Guidance Document (www.epa.gov/Arkansas/6pd/rcra_c/pd-o/riskman.htm) developed by the U.S. Environmental Protection Agency (EPA) Region 6 whenever the Administrative Authority determines that such guidance will serve to facilitate the corrective action that is required under applicable law. The CAS Guidance Document shall be utilized to the fullest extent practicable for planning and implementation of the corrective action. The CAS in this Permit shall not supersede existing Federal, State, and local regulations. The two primary objectives are to prioritize corrective action at the facility, and streamline corrective action administrative procedures, resulting in the protection of human health and the environment.

The CAS is a performance-based approach; using data quality objectives, investigations begin with the endpoint in mind. The CAS is a risk management strategy that can be implemented during any phase of corrective action. However, the CAS need not be applied to work that has already been completed to the satisfaction of the Administrative Authority. Performance standards are established at the beginning of the corrective action process, allowing earlier and more focused implementation. Releases are screened using RECAP screening numbers to determine the priority of corrective action, and remedial alternatives are selected on the basis of their ability to achieve and maintain the established performance standards.

There is no one specific path through the CAS process. The CAS is a facility-wide approach, focusing corrective action on releases that pose the greatest risk first. Screening releases will also enable some areas of interest to qualify for no further action at this time (Condition VIII.A.3.a.), thus resources can be used to best benefit the protection of human health and the environment. The CAS process also considers activities previously conducted under the traditional RCRA corrective action process and other corrective action mechanisms approved by the Administrative Authority. Appendix 1 of this permit contains a summary of corrective action activities completed to date and also describes where the Permittee is in the CAS process at the time of issuance of this permit. The applicability of various provisions of the CAS will depend on where the Permittee is in the CAS process as detailed in Appendix 1.

The traditional RCRA corrective action process and reports (i.e., RFIs, CMSs, CMIs, etc.) are not elements of the CAS. However, the use of information and reports from the traditional corrective action process, if available, is encouraged, in addition to new site-specific information.

The Administrative Authority, through an agency-initiated permit modification, may remove the CAS as the means of facility-wide corrective action in the case of the failure of the Permittee to disclose information, abide by the terms and conditions of this permit, adhere to agreed schedules, or show adequate progress; or should an

impasse occur between the Permittee and the Administrative Authority. Likewise, upon granting a request by the Permittee to modify the permit in this regard, the Administrative Authority may remove the CAS as the means of facility-wide corrective action. In such cases, the Administrative Authority will institute other means of corrective action (such as traditional corrective action) at the facility through modification of this permit.

VIII.A.2. Performance Standards

Expectations for the outcome of corrective action at a facility are established in the CAS by three performance standards as defined in Conditions VIII.A.2.a through c. The Permittee's proposed performance standards shall be presented during the scoping meeting. The Permittee must justify the proposed performance standards through evaluation and documentation of land use, groundwater designation (current and reasonably expected future use), types of receptors present, exposure pathways, etc.; as described in RECAP, Chapter 2. Through the application of the performance standards and RECAP, the Permittee and Administrative Authority shall determine whether a release must be addressed through corrective action, and whether implemented corrective actions are protective of human health and the environment. The Permittee shall submit the performance standards in writing along with the Conceptual Site Model (Condition VIII.D) within one-hundred and twenty (120) days after the scoping meeting. The Administrative Authority may either approve the performance standards proposed by the Permittee or establish performance standards that the Administrative Authority deems necessary to protect human health and the environment.

The three CAS performance standards are defined below. The order in which the performance standards are listed does not indicate that one performance standard takes priority over another. All applicable performance standards must be achieved by the Permittee.

VIII.A.2.a. Source Control Performance Standard

Source control refers to the control of materials that include or contain hazardous wastes or hazardous constituents that act as a reservoir for migration of contamination to soil, sediment, groundwater, surface water, or air, or as a source for direct exposure.

The facility must determine if source material is present. Removal, containment, treatment, or a combination of the three, must be evaluated on a case-by-case basis. Controlling source material is a predominating issue in the CAS, and must be addressed to ensure protectiveness over time. Prioritization of the SWMUs and AOCs does not mean avoidance of controlling source materials.

VIII.A.2.b. Statutory and Regulatory Performance Standard

Applicable statutory and regulatory requirements (Federal, State, and local) must be identified. These requirements may dictate media-specific contaminant levels (e.g., maximum contaminant levels (MCLs) in drinking water) that must be achieved and may become a performance standard for the Permittee.

VIII.A.2.c. Final Risk Goal Performance Standard

The final risk goal is the level of protection to be achieved and maintained by the Permittee. The final risk goal shall be based on site-specific issues including land use, special subpopulations, contaminant concentrations based on acceptable risk, location at which the levels are measured, and the remediation time frame, as specified by RECAP.

One final risk goal may apply to the entire facility, but it is more likely that different releases will require different final risk goals due to variations in location of releases, land use, proximity of receptors, etc. The final risk goal will be based on sound risk assessment methodologies (Condition VIII.A.3).

VIII.A.3. Use of RECAP

The latest edition of the RECAP document shall be used by the Permittee to determine the need for further corrective actions under this permit. The RECAP consists of a tiered framework comprised of a Screening Option (SO), and three Management Options (MO). The tiered management options allow site evaluation and corrective action efforts to be tailored to site conditions and risks. As the MO level increases, the approach becomes more site-specific and hence, the level of effort required to meet the objectives of the Option increases.

The RECAP shall be used by the Permittee to evaluate data quality and data usability (RECAP Section 2.4 and 2.5), to determine the identity of an AOI as described in RECAP Section 2.6, and for estimations of Area of Investigation Concentrations and Groundwater Compliance Concentrations for each media as defined in RECAP Section 2.8.

The RECAP shall be used by the Permittee to evaluate land use as described in RECAP Section 2.9, and groundwater/aquifer use as described in RECAP Section 2.10.

The RECAP shall be used by the Permittee to prioritize AOCs, SWMUs, and AOIs that require remediation so site investigations are focused on the release areas that pose the greatest risk. As the CSM is compiled, the Permittee shall assess historical data (RECAP Section 2.5) and use the following management options, as appropriate, to address each release site.

VIII.A.3.a. Screening Option

The Permittee shall use the Screening Standards (SS) which are LDEQ-derived screening numbers for soil and groundwater for non-industrial and industrial land use scenarios. The SS shall be used to demonstrate that an AOI does not pose a threat to human health and the environment and, hence does not require further action at this time (NFA-ATT) or that further evaluation is warranted under a higher Management Option.

VIII.A.3.b. Management Option 1

The Permittee shall use Management Option 1 (MO-1) which provides a RECAP standard (RS) derived for non-industrial and industrial exposure scenarios using currently recommended default exposure parameters and toxicity values. Under MO-1, an AOI may warrant a NFA-ATT determination, or if an exposure, source, or compliance concentration detected at the AOI exceeds a MO-1 limiting RS, then the Permittee may; (1) remediate to the MO-1 limiting RS (and comply with closure/post closure requirements for MO-1), or (2) proceed with a MO-2 or MO-3 evaluation.

VIII.A.3.c. Management Option 2

The Permittee shall use Management Option 2 (MO-2) which provides for the development of soil and groundwater RS using site-specific data with specified analytical models to evaluate constituent fate and transport at the AOI. The results of this evaluation shall be used in conjunction with standard reasonable maximum exposure (RME) assumptions to identify site-specific MO-2 RS. Under MO-2, an AOI may warrant a NFA-ATT determination, or if an exposure, source, or compliance concentration detected at the AOI exceeds a MO-2 limiting RS, then the Permittee may; (1) remediate to the MO-2 limiting RS (and comply with closure/post closure requirements for MO-2), or (2) proceed with a MO-3 evaluation.

VIII.A.3.d. Management Option 3

The Permittee shall use Management Option 3 (MO-3) which provides the option of using site-specific data for the evaluation of exposure and the evaluation of environmental fate and transport at the AOI. The results of the site-specific evaluation may be to develop site-specific MO-3 RS. Under MO-3, an AOI may warrant a NFA-ATT determination, or if an exposure, source, or compliance concentration detected at the AOI exceeds a MO-3 limiting RS, then the Permittee shall; (1) remediate to the MO-3 RS, (2) conduct confirmatory sampling, and (3) comply with closure/post closure requirements for MO-3.

VIII.A.4. Corrective Action for Releases Beyond Facility Boundary

Section 3004(v) of RCRA as amended by HSWA, and State regulations promulgated as LAC 33:V.3322.C require corrective actions beyond the facility property boundary, where necessary to protect human health and the environment, unless the Permittee demonstrates that, despite the Permittee's best efforts, the Permittee was unable to obtain the necessary permission to undertake such actions. The Permittee is not relieved of all responsibility to clean up a release that has migrated beyond the facility boundary where offsite access is denied.

VIII.A.5. Financial Responsibility

Assurances of financial responsibility for corrective action shall be provided by the Permittee as specified in the Permit following major modification for remedy selection. The Administrative Authority reserves the right to require financial assurance prior to remedy selection based upon facility compliance history, the extent and degree of contamination, financial health of the Permittee, and input from the public.

VIII.A.6. Summary of Corrective Action Activities

A summary of the corrective action activities associated with the facility is provided in Condition VIII, Appendix 1 of this permit. AOCs and SWMUs that are currently being managed or proposed for management under a prescribed corrective action program (e.g., groundwater order, corrective action order, CERCLA) are identified in Condition VIII, Appendix 1, Table 1 of this permit.

VIII.A.7. Approval of Alternate Schedule

The Permittee may submit a written request for an alternate schedule for a submittal deadline as presented in Condition VIII, Table 1. The request should propose a specific alternate schedule and include an explanation as to why the alternate schedule is necessary. The Administrative Authority will consider site-specific criteria in either approving or disapproving the request for an alternate schedule.

VIII.B. PROJECT DEVELOPMENT AND SCOPING MEETING

VIII.B.1. Notice of Intent

The Permittee must submit to the Administrative Authority a Notice of Intent to conduct corrective action using the CAS within sixty (60) days of the effective date of this permit. The notice of intent should state the following in a concise manner:

VIII.B.1.a. General information regarding facility location;

VIII.B.1.b. General information regarding the facility's operational history;

VIII.B.1.c. General discussion on how the Permittee will proceed through the CAS;

VIII.B.1.d. Brief description of proposed performance standards for corrective action; and

VIII.B.1.e. Propose a date for a scoping meeting between the Permittee and the Administrative Authority to be held within sixty (60) days of the date of the Notice of Intent.

VIII.B.2. Scoping Meeting

The scoping meeting will serve as the first CAS milestone where the Permittee and the Administrative Authority identify expectations concerning CAS implementation. The length and extent of the meeting will depend on the complexity of the site. Agreements on land use, groundwater classification, the level of detail required in the conceptual site model (see Condition VIII.D) and expectations for remediation goals will be discussed during the scoping meeting(s). During the scoping meeting the Permittee will present the following information to the Administrative Authority:

VIII.B.2.a. A conceptual site model (if one already has been developed);

VIII.B.2.b. Discussions on history of corrective action at the facility, including facility investigations, risk evaluations or risk assessments, interim measure/stabilizations and final remedies implemented;

VIII.B.2.c. Proposed performance standards for the facility with justification, and potential risk management approaches;

VIII.B.2.d. Discussions on how the Permittee plans to use the CAS to meet its corrective action obligations, including permitting and compliance issues;

VIII.B.2.e. A Communication Strategy Plan that specifies where in the CAS process the Permittee is currently and how the Permittee will provide information about future progress at the facility to the Administrative Authority (i.e., progress reports, conference calls, routine meetings, etc.);

VIII.B.2.f. Site-specific concerns (i.e., sensitive environments or special subpopulations);

VIII.B.2.g. Need for interim measures or stabilization activities, if necessary; and

VIII.B.2.h. Schedule for submittal of the CAS Investigation Workplan and proposed schedule for conducting and completing CAS requirements, including public participation.

Information plans and reports that have already been developed by the Permittee during the corrective action process can be referenced during the scoping meeting. The Permittee must coordinate with the Administrative Authority in order to determine the date, time, and location of the scoping meeting.

VIII.C. REPORTING REQUIREMENTS

VIII.C.1. The Permittee shall submit, in accordance with Condition VII.A.8, signed reports of all activities conducted pursuant to the provisions of this Permit as required by the Administrative Authority. The reporting schedule shall be determined on a case-by-case basis by the Administrative Authority. The Administrative Authority shall consider previously established reporting requirements and shall take steps to streamline reporting requirements and avoid duplicative reporting. These reports shall contain, as applicable to the stage of corrective action, the information required by CAS, as well as the following:

VIII.C.1.a. A description of the work completed and an estimate of the percentage of work completed;

VIII.C.1.b. Summaries of all findings, including summaries of laboratory data;

VIII.C.1.c. Summaries of all problems or potential problems encountered during the reporting period and actions taken to rectify problems;

VIII.C.1.d. Projected work for the next reporting period;

VIII.C.1.e. Summaries of contacts pertaining to corrective action or environmental matters with representatives of the local community, public interest groups or State government during the reporting period;

VIII.C.1.f. Changes in key project personnel during the reporting period; and

VIII.C.1.g. Summaries of all changes made in implementation during the reporting period.

VIII.C.2. Copies of other reports relating to or having bearing upon the corrective action work (e.g., inspection reports, drilling logs and laboratory data) shall be made available to the Administrative Authority upon request.

VIII.C.3. In addition to the written reports as required in Condition VIII.C.1 and VIII.C.2 above, at the request of the Administrative Authority, the Permittee shall provide status review through briefings with the Administrative Authority.

VIII.C.4. The determination and approval of remedy selections, schedules of submittals and minor changes to any corrective action workplans may be made by the

Administrative Authority during the scoping meeting or status review briefings as described in Condition VIII.C.3.

VIII.D. SPECIFIC CONDITION – CONCEPTUAL SITE MODEL (CSM)

No later than 120 days after the scoping meeting, the Permittee shall submit to the Administrative Authority a CSM (along with the Performance Standards detailed in Condition VIII.A.2) or an update of any CSM submitted at the scoping meeting providing background information and the current conditions at the facility. The level of detail required for the CSM will be discussed during the scoping meeting. At a minimum, the CSM must address current site conditions, land use, known and/or potential constituent source(s), routes of constituent migration, exposure media (i.e., soil, surface waters, groundwater), exposure points, points of compliance and pathways, receptors and source media to be evaluated under the RECAP. The CSM must include a completed Figure 8 (LAC 33:I.Chapter 13). The Permittee may include completed investigations, existing data, or previously submitted documents in the CSM by reference. References must include the names, dates, and brief summaries of the documents.

If a CSM has been previously developed, the scoping meeting will also provide the opportunity for the Permittee and Administrative Authority to consider and identify all data gaps in the CSM. The initial CSM shall be considered the "base document" to be prepared and updated by the facility as new information is gathered during investigations. The CSM shall be used by the facility to make decisions regarding risk management options, ecological risk, and monitored natural attenuation determinations (RECAP Section 2.16), or technical impracticability (TI) waiver determinations, when appropriate.

The Administrative Authority reserves the right to require revisions to the CSM based upon data resulting from ongoing investigations and activities. Revisions to the CSM may also be required for newly identified SWMUs or AOCs according to Condition VIII.L of this permit (See Appendix 1, Ongoing Corrective Action) and based on new information and information not previously considered by the Administrative Authority.

The CSM shall be divided into Profiles as detailed in Conditions VIII.D.1 through 6. If the Permittee chooses to use existing data and documents in the CSM, it may not be necessary to prepare the Profiles as detailed in Conditions VIII.D.1 through 6. However, the existing documents and data must provide sufficient information and detail which corresponds to the information required by the Facility, Land Use and Exposure, Physical, Release, Ecological, and Risk Management Profiles.

VIII.D.1. Facility Profile

The Permittee shall include in the CSM a Facility Profile which shall summarize the regional location, pertinent boundary features, general facility structures, process areas, and locations of solid waste management units or other potential sources of contaminant migration from the routine and systematic releases of hazardous constituents to the environment (e.g., truck or railcar loading/unloading areas). The

Permittee shall also include historical features that may be potential release areas because of past management practices. The Facility Profile shall include:

VIII.D.1.a. Map(s) and other documents depicting the following information (all maps shall be consistent with the requirements set forth in LAC 33:V Chapter 5 and be of sufficient detail and accuracy to locate and report all current site conditions):

VIII.D.1.a.(1). General geographic location;

VIII.D.1.a.(2). Property lines with the owners of all adjacent property clearly indicated;

VIII.D.1.a.(3). Facility structures, process areas and maintenance areas;

VIII.D.1.a.(4). Any other potential release areas shall be delineated, such as railcar loading/unloading areas or any other AOI as described in RECAP Section 2.6; and

VIII.D.1.a.(5). Locations of historical features that may be potential release areas or any areas of past solid and hazardous waste generation, treatment, storage or disposal activities.

VIII.D.1.b. The Facility Profile shall also include a description of ownership and operation of the facility.

VIII.D.1.c. The Permittee shall provide pertinent information for those spills that have not been assessed and reported to the Administrative Authority during facility investigations, addressed by facility spill contingency plans, or previously remediated or deemed for no further action. The information must include at minimum, approximate dates or periods of past waste spills, identification of the materials spilled, the amount spilled, the location where spilled, and a description of the response actions conducted (local, state, federal, or private party response units), including any inspection reports or technical reports generated as a result of the response.

VIII.D.2. Land Use and Exposure Profile

The Permittee shall include in the CSM a Land Use and Exposure Profile which includes surrounding land uses (industrial and non-industrial, as described in RECAP Sections 2.9.1 and 2.9.2), resource use locations (water supply wells, surface water intakes, etc.), beneficial resource determinations (groundwater classifications as described in RECAP Section 2.10), natural resources (wetlands, etc.), sensitive subpopulation types and locations (schools, hospitals, nursing homes, day care centers, etc.), applicable exposure scenarios, and applicable exposure pathways

identifying the specific sources, releases, migration mechanisms, exposure media, exposure routes and receptors. The Land Use and Exposure Profile shall include:

VIII.D.2.a. Map(s) and other documents depicting the following information (all maps shall be consistent with the requirements set forth in LAC 33:V Chapter 5 and be of sufficient detail and accuracy to locate and report all current site conditions):

VIII.D.2.a.(1). Surrounding land uses, resource use locations, and natural resources/wetlands;

VIII.D.2.a.(2). Locations of sensitive subpopulations; and

VIII.D.2.a.(3). An exposure pathway flowchart which outlines sources, migration pathways, exposure media and potential receptors as depicted in Figure 8 (CMS example) of the RECAP.

VIII.D.3. Physical Profile

The Permittee shall include in the CSM a Physical Profile which shall describe the factors that may affect releases, fate and transport, and receptors, including; topography, surface water features, geology, and hydrogeology. The Physical Profile shall include:

VIII.D.3.a. Map(s) and other documents depicting the following information (all maps shall be consistent with the requirements set forth in LAC 33:V.Chapter 5 and be of sufficient detail and accuracy to locate and report all current site conditions):

VIII.D.3.a.(1). Topographic maps with a contour interval of five (5) or ten (10) feet, a scale of one inch to 100 feet (1:100), including hills, gradients, and surface vegetation or pavement;

VIII.D.3.a.(2). Surface water features including routes of all drainage ditches, waterways, direction of flow, and how they migrate to other surface water bodies such as canals and lakes;

VIII.D.3.a.(3). Regional geology including faulting and recharge areas, as well as local geology depicting surface features such as soil types, outcrops, faulting, and other surface features;

VIII.D.3.a.(4). Subsurface geology including stratigraphy, continuity (locations of facies changes, if known), faulting and other characteristics;

VIII.D.3.a.(5). Maps with hydrogeologic information identifying water-bearing zones, hydrologic parameters such as transmissivity,

and conductivity. Also locations and thicknesses of aquitards or impermeable strata; and

VIII.D.3.a.(6). Locations of soil borings and production and groundwater monitoring wells, including well log information, and construction of cross-sections which correlate substrata. Wells shall be clearly labeled with ground and top of casing elevations (can be applied as an attachment).

VIII.D.4. Release Profile

The Permittee shall include in the CSM a Release Profile which shall describe the known extent of contaminants in the environment, including sources, contaminants of concern (COC), areas of investigations, distribution and magnitude of known COCs with corresponding sampling locations, and results of fate and transport modeling depicting potential future extent/magnitude of COCs. The Release Profile shall include:

VIII.D.4.a. Map(s) and other documents depicting the following information (all maps shall be consistent with the requirements set forth in LAC 33:V. Chapter 5 and be of sufficient detail and accuracy to locate and report all current site conditions):

VIII.D.4.a.(1). Estimations of source concentrations, exposure concentrations and compliance concentrations for each affected media as defined in Section 2.8 of RECAP;

VIII.D.4.a.(2). Isopleth maps depicting lateral extent and concentrations of COCs;

VIII.D.4.a.(3). Results of fate and transport modeling showing potential exposure concentrations and locations; and

VIII.D.4.a.(4). Locations of potential sources including past or present waste units or disposal areas and all SWMUs/AOCs.

VIII.D.4.b. Table(s) depicting the following information for each SWMU/AOC, including but not limited to: location; type of unit/disposal/release area; design features; operating practices (past and present); period of operation; age of unit/disposal/release area; general physical condition; and method of closure.

VIII.D.4.c. Table(s) depicting the following waste/contaminant characteristics for those areas referenced in Condition VIII.D.4.b, including but not limited to: type of waste placed in the unit (hazardous classification, quantity, chemical composition), physical and chemical characteristics (physical form, description, temperature, pH, general chemical class, molecular weight, density, boiling point, viscosity, solubility in water, solubility in solvents,

cohesiveness, vapor pressure); and migration and dispersal characteristics of the waste (sorption coefficients, biodegradability, photodegradation rates, hydrolysis rates, chemical transformations).

VIII.D.5. Ecological Profile

The Permittee shall include in the CSM an Ecological Profile that shall describe the physical relationship between the developed and undeveloped portions of the facility, the use and level of disturbance of the undeveloped property, and the type of ecological receptors present in relation to completed exposure pathways. When compiling data for the Ecological Profile, current, as well as, future impacts to receptors and/or their habitats shall be considered. The Ecological Profile shall include:

VIII.D.5.a. A history and description of the developed property on the facility, including structures, process areas, waste management units, and property boundaries;

VIII.D.5.b. A history and description of the undeveloped property, including habitat type (wetland, grassy area, forest, ponds, etc.). Include a description of the primary use, degree and nature of any disturbance, along with proximity to drainage ditches, waterways and landfill areas;

VIII.D.5.c. A description of the site receptors in relation to habitat type, including endangered or protected species, mammals, birds, fish, etc.;

VIII.D.5.d. A description of the relationship between release areas and habitat areas, specifically relating chemicals of potential ecological concern (COEC) to ecological receptors;

VIII.D.5.e. An ecological checklist as described in Section 7.0 of RECAP. An ecological checklist (presented in Appendix C, Form 18 of the RECAP) shall be used to determine if a tier 1 (screening level) Ecological Risk Assessment (ERA) is warranted.

VIII.D.6. Risk Management Profile

The Permittee shall include in the CSM a Risk Management Profile that shall describe how each AOI at the facility will be managed for the protection of human health and the environment. The Risk Management Profile will serve as documentation of the results of the site ranking system (described in Section 2.2 of RECAP). The Risk Management Profile will also document the criteria and verify that the SO, MO-1, MO-2 or MO-3 is appropriate for application at each AOI. The Risk Management Profile shall include:

VIII.D.6.a. A table for tracking the management options for each AOI, and the determination made, whether an AOI is deemed for no further action at

this time (NFA-ATT) or is going to use either the SO, MO-1, MO-2 or MO-3 management option.

VIII.D.6.b. A list of identified site-wide data gaps for further investigation.

VIII.D.6.c. Documentation of all interim measures which have been or are being undertaken at the facility, including under State or Federal compliance orders, other than those specified in the Permit. This documentation shall include the objectives of the interim measures and how the measure is mitigating a potential threat to human health or the environment and/or is consistent with and integrated into requirements for a long term remedial solution.

VIII.E. INTERIM MEASURES

VIII.E.1. If at any time during the term of this Permit, the Administrative Authority determines that a release or potential release of hazardous constituents from a SWMU/AOC poses a threat to human health and the environment, the Administrative Authority may require interim measures. The Administrative Authority shall determine the specific measure(s) or require the Permittee to propose a measure(s). The interim measure(s) may include a permit modification, a schedule for implementation, and an Interim Measures Workplan. The Administrative Authority may modify this Permit according to LAC 33:V.321 to incorporate interim measures into the Permit. However, depending upon the nature of the interim measures, a permit modification may not be required.

VIII.E.2. The Permittee may propose interim measures at any time by submittal of an Interim Measures Workplan subject to the approval of the Administrative Authority.

VIII.E.3. The Administrative Authority shall notify the Permittee in writing of the requirement to perform interim measures and may require the submittal of an Interim Measures Workplan. The following factors will be considered by the Administrative Authority in determining the need for interim measures and the need for permit modification:

VIII.E.3.a. Time required to develop and implement a final remedy;

VIII.E.3.b. Actual and potential exposure to human and environmental receptors;

VIII.E.3.c. Actual and potential contamination of drinking water supplies and sensitive ecosystems;

VIII.E.3.d. The potential for further degradation of the medium in the absence of interim measures;

VIII.E.3.e. Presence of hazardous wastes in containers that may pose a threat of release;

VIII.E.3.f. Presence and concentration of hazardous waste including hazardous constituents in soil that has the potential to migrate to groundwater or surface water;

VIII.E.3.g. Weather conditions that may affect the current levels of contamination;

VIII.E.3.h. Risks of fire, explosion, or accident; and

VIII.E.3.i. Other situations that may pose threats to human health and the environment.

VIII.E.4. Upon approval of the Interim Measures Workplan and completion of the interim measure(s) implementation, the Permittee will submit a report to the Administrative Authority describing the completed work.

VIII.E.5. At anytime during or after the interim measure(s), including the issuance of an NFA-ATT, the Administrative Authority may require the Permittee to submit the SWMUs/AOCs for further corrective action.

VIII.F. CAS (CORRECTIVE ACTION STRATEGY) INVESTIGATION WORKPLAN

VIII.F.1. The CAS Investigation Workplan that describes site investigation activities for corrective action shall be submitted to the Administrative Authority within 180 days after the scoping meeting between the Permittee and the Administrative Authority. The CAS Investigation Workplan must address releases of hazardous waste or hazardous constituents to all media, unless otherwise indicated, for those SWMUs/AOCs listed in Appendix 1, Table 1. The focus of the site investigation phase for corrective action is to collect data to fill in data gaps identified in the CSM. The corrective action investigations may be conducted in phases if warranted by site conditions, contingent upon approval by the Administrative Authority.

VIII.F.1.a. The CAS Investigation Workplan shall describe the management options (MO) for each AOI/release area, data quality objectives for achieving each management option, and proposals for release characterizations (sampling and analysis/quality assurance plans) to support the data quality objectives (DQOs). (DQOs are determined based on the end use of the data to be collected, and the DQO development process should be integrated into project planning and refined throughout the CAS implementation. DQOs shall be used to 1) ensure that environmental data are scientifically valid, defensible, and of an appropriate level of quality given the intended use, and 2) expedite site investigations. The CAS Investigation Workplan is required to have DQOs that are developed to support the performance standard for each

release.) The CAS Investigation Workplan shall detail all proposed activities and procedures to be conducted at the facility, the schedule for implementing and completing such investigations, the qualifications of personnel performing or directing the investigations, including contractor personnel, and the overall management of the site investigations. The scope of work for the site investigation can be found in RECAP Appendix B.

VIII.F.1.b. The CAS Investigation Workplan shall describe sampling, data collection quality assurance, data management procedures (including formats for documenting and tracking data and other results of investigations) and health and safety procedures.

VIII.F.1.c. Development of the CAS Investigation Workplan and reporting of data shall be consistent with the latest version of the following EPA and State guidance documents or the equivalent thereof:

VIII.F.1.c.(1). Guidance for the Data Quality Assessment, Practical Methods for Data Analysis. QA97 Version EPA QA/G-9. January 1998;

VIII.F.1.c.(2). Guidance for the Data Quality Objectives Process. EPA QA/G-4. September 1994;

VIII.F.1.c.(3). Data Quality Objectives Remedial Response Activities. EPA/540/G87-003. March 1987;

VIII.F.1.c.(4). Guidance on Quality Assurance Project Plans. EPA QA/G-5. February 1998;

VIII.F.1.c.(5). Interim EPA Data Requirements for Quality Assurance Project Plans. EPA Region 6, Office of Quality Assurance. May 1994;

VIII.F.1.c.(6). 29 CFR 1910.120 (b) for the elements to Health and Safety plans;

VIII.F.1.c.(7). RCRA Groundwater Monitoring: Draft Technical Guidance EPA/530-R-93-001 November 1992;

VIII.F.1.c.(8). Test Methods for Evaluating Solid Waste, Physical/Chemical Methods; SW-846, 3rd Edition. November 1992, with revisions;

VIII.F.1.c.(9). The LDEQ Handbook - **Construction of Geotechnical Boreholes and Groundwater Monitoring Systems," prepared by the LDEQ and the Louisiana Department of Transportation and Development.** This document is printed by and available from the Louisiana Department of Transportation and Development, Water

Resources Section, P. O. Box 94245, Baton Rouge, Louisiana 70804-9245; and

VIII.F.1.c.(10). The LAC 33:I.Chapter 13 and Louisiana Department of Environmental Quality Risk Evaluation/Corrective Action Program (RECAP).

VIII.F.2. After the Permittee submits the CAS Investigation Workplan; the Administrative Authority will approve, disapprove, or otherwise modify the CAS Investigation Workplan in writing. All approved workplans become enforceable components of this Permit.

In event of disapproval (in whole or in part) of the workplan, the Administrative Authority shall specify deficiencies in writing. The Permittee shall modify the CAS Investigation Workplan to correct these within the time frame specified in the notification of disapproval by the Administrative Authority. The modified workplan shall be submitted in writing to the Administrative Authority for review. Should the Permittee take exception to all or part of the disapproval, the Permittee shall submit a written statement of the ground for the exception within fourteen (14) days of receipt of the disapproval.

VIII.F.3. The Administrative Authority shall review for approval, as part of the CAS Investigation Workplan or as a new workplan, any plans developed pursuant to Condition VIII.L addressing further investigations of newly-identified SWMUs/AOCs, or Condition VIII.M addressing new releases from previously-identified SWMUs/AOCs.

VIII.G. IMPLEMENTATION OF SITE INVESTIGATION ACTIVITIES UNDER CAS

No later than fourteen (14) days after the Permittee has received written approval from the Administrative Authority for the CAS Investigation Workplan, the Permittee shall implement the site investigation activities according to the schedules and in accordance with the approved CAS Investigation Workplan and the following:

VIII.G.1. The Permittee shall notify the Administrative Authority at least 10 working days prior to any field sampling, field-testing, or field monitoring activity required by this Permit to give LDEQ personnel the opportunity to observe investigation procedures and/or split samples.

VIII.G.2. Deviations from the approved CAS Investigation Workplan, which are necessary during implementation, must be approved by the Administrative Authority and fully documented and described in the progress reports (Condition VIII.C), RECAP Report (Condition VIII.H) and the final Risk Management Plan (Condition VIII.J).

VIII.H. RECAP REPORT

Within ninety (90) days after completion of the site investigation the Permittee shall submit a RECAP Report to the Administrative Authority for approval. The RECAP Report shall document the results of the site investigation activities, and the evaluation of the impacts from releases. The Administrative Authority will review and evaluate the report and provide the Permittee with written notification of the report's approval or a notice of deficiency. If the Administrative Authority determines the RECAP Report does not fully meet the objectives stated in the CAS Investigation Workplan (Permit Condition VIII.F), the Administrative Authority shall notify the Permittee in writing of the report's deficiencies, and specify a due date for submittal of a revised Final Report to the Administrative Authority.

VIII.H.1. The Permittee shall screen site-specific data using the appropriate RECAP standard (RS) for each AOI (depending on the MO), evaluate impacts from releases with exposure scenario evaluations, and update the Risk Management Profile of the CSM.

VIII.H.2. The report shall include, but not be limited to, the following:

VIII.H.2.a. Documentation of site investigation activities and results;

VIII.H.2.b. Evaluation of exposure scenarios to document impacts from releases;

VIII.H.2.c. Deviations from the CAS Investigation Workplan;

VIII.H.2.d. Results of screening activities using RECAP standards (RS), including SO, MO-1, MO-2, or MO-3 RS for each media;

VIII.H.2.e. The revised CSM with updated profiles which incorporate investigation and screening results; and

VIII.H.2.f. Proposed revisions to performance standards based on new information (e.g., change in land use, difference in expected receptors and/or exposure, or other differences in site conditions), if warranted.

VIII.I. REMEDIAL ALTERNATIVES STUDY

Upon completion and approval of the RECAP Report, the Permittee shall proceed with the evaluation of remedial alternatives to complete corrective action for each AOI according to the performance standards described in Condition VIII.A.2. The remedial alternatives shall be submitted to the Administrative Authority in the Remedial Alternatives Study (RAS) within ninety (90) days of the Administrative Authority's approval of the RECAP Report. In the Remedial Alternatives Study, the Permittee shall identify and evaluate various potential remedies that would meet the performance-based corrective action objectives and propose one or more specific remedies based on an evaluation of applicable data and available

corrective action technologies. The RAS shall be prepared in a manner that addresses the extent and nature of the contamination at the facility.

VIII.I.1. The Permittee shall evaluate remedies for each AOI that shall:

VIII.I.1.a. attain compliance with corrective action objectives for releases of hazardous waste and/or hazardous constituents, as established in the Conceptual Site Model or in later investigations approved by the Administrative Authority;

VIII.I.1.b. control sources of releases;

VIII.I.1.c. meet acceptable waste management requirements;

VIII.I.1.d. protect human health and the environment; and

VIII.I.1.e. meet applicable statutory and regulatory requirements (as noted in Condition VIII.A.2.b).

VIII.I.2. The Permittee shall evaluate the use of presumptive remedies and innovative technologies to achieve the appropriate remedial performance standards for each AOI.

VIII.I.3. The Permittee shall review the current interim measures/ stabilization activities to evaluate if these measures meet all the criteria for final remedy.

VIII.I.4. If under certain site-specific conditions, or when it is not technically or economically feasible to attain the corrective action objectives, the Permittee may propose to use institutional controls to supplement treatment or containment-based remedial actions upon approval of the Administrative Authority (Section 2.15 of RECAP).

VIII.I.5. The RAS shall at a minimum include:

VIII.I.5.a. An evaluation of the performance reliability, ease of implementation, and the potential impacts of the potential remedies;

VIII.I.5.b. An assessment of the effectiveness of potential remedies in achieving adequate control of sources and meeting remedial performance standards;

VIII.I.5.d. An assessment of the costs of implementation for potential remedies;

VIII.I.5.e. An assessment of the time required to begin and complete the remedy;

VIII.I.5.f. An explanation of the rationale for the remedy proposed for each AOI or group of AOIs; and

VIII.I.5.g. An assessment of institutional requirements (e.g., state permit requirements that may impact remedy implementation).

VIII.I.6. The Administrative Authority will review and evaluate the RAS and provide the Permittee with written notification of the study's approval or a notice of deficiency. If the Administrative Authority determines the RAS does not fully meet the requirements detailed in Conditions VIII.I.1 through VIII.I.5, the Administrative Authority shall notify the Permittee in writing of the RAS's deficiencies, and specify a due date for submittal of a revised RAS to the Administrative Authority. In addition, the Administrative Authority may require the Permittee to evaluate additional remedies or particular elements of one or more proposed remedies.

VIII.J. RISK MANAGEMENT PLAN

Within ninety (90) days of the Administrative Authority's approval of the RAS, the remedy/remedies proposed for selection shall be documented and submitted in the Risk Management Plan. The Permittee shall propose corrective action remedies in accordance with Chapter IV of the RCRA Corrective Action Plan (Final), May 1994, OSWER Directive 9902.3-2A or as directed by the Administrative Authority.

VIII.J.1. The Risk Management Plan shall at a minimum include:

VIII.J.1.a. A summary of the remedial alternatives for each AOI and the rationale used for remedy selection;

VIII.J.1.b. The final CSM with proposed remedies, including locations of AOIs addressed by a risk management activity, COC concentrations that represent the long-term fate and transport of residual COCs and the exposure pathways affected by the risk management activity;

VIII.J.1.c. Cost estimates and implementation schedules for proposed final remedies;

VIII.J.1.d. Proposed remedy design and implementation precautions, including special technical problems, additional engineering data required, permits and regulatory requirements, property access, easements and right-of-way requirements, special health and safety requirements, and community relations activities;

VIII.J.1.e. Remedy performance criteria and monitoring:

The Permittee shall identify specific criteria (such as land use changes, fate and transport model verification and constructed remedy performance) that will be evaluated to demonstrate that the risk management activity

implemented will remain protective. A schedule for periodic performance review (such as monitoring data summaries, including graphical and statistical analyses) shall be established to demonstrate that the implemented activities are consistently achieving and maintaining desired results. Further, a mechanism shall be established to re-evaluate risk management activities in the event the implemented action does not achieve and maintain the performance standards;

VIII.J.1.f. Contingency plans; and

VIII.J.1.g. Description and schedules for performance reviews.

VIII.J.2. After the Permittee submits the Risk Management Plan, the Administrative Authority will review and evaluate the plan and subsequently either inform the Permittee in writing that the plan is acceptable for public review or issue a notice of deficiency.

VIII.J.3. If the Administrative Authority determines the Risk Management Plan does not fully meet the remedial objectives, the Administrative Authority shall notify the Permittee in writing of the plan's deficiencies and specify a due date for submittal of a revised Final Risk Management Plan. In addition, the Administrative Authority may require the Permittee to evaluate additional remedies or particular elements of one or more proposed remedies.

VIII.J.4. After the Administrative Authority has determined the Risk Management Plan is acceptable for public review, the Administrative Authority shall inform the Permittee in writing and instruct the Permittee to submit the plan as a Class 3 permit modification request in accordance with the requirements of LAC 33:V.321.C.3.

VIII.J.5. After conclusion of a sixty (60) day comment period, the Administrative Authority will either grant or deny the Class 3 permit modification request. In addition the Administrative Authority must consider and respond to all significant comments received during the sixty (60) day comment period.

VIII.J.6. If the Class 3 Modification request is granted, the Administrative Authority shall prepare a draft permit incorporating the proposed changes in accordance with LAC 33:V.703.C and solicit public comment on the draft permit modification according to Condition VIII.N.3 of this permit.

VIII.J.7. If, after considering all public comments, the Administrative Authority determines that the Risk Management Plan is adequate and complete, the Administrative Authority will issue a public notice for final approval the Class 3 permit modification. The resultant modified permit will include schedules for remedy implementation as well as financial assurance provisions as required by Condition VIII.A.5 of this permit.

VIII.K. DETERMINATION OF NO FURTHER ACTION

VIII.K.1. NFA-ATT Determinations for Specific SWMUs/AOCs

VIII.K.1.a. Based on the results of the site investigations, screening, risk evaluations and risk management activities, the Permittee may request a NFA-ATT determination for a specific SWMU/AOC by submittal of a Class 1[1] permit modification ([1] requiring Administrative Authority approval) request under LAC 33:V.321.C.1. The NFA-ATT request must contain information demonstrating that there are no releases of hazardous constituents from a particular SWMU/AOC that pose a threat to human health and/or the environment.

The basis for the determination of NFA-ATT shall follow the guidelines as described in the RECAP (Section 1.2.1 of RECAP) for each AOI, depending on the MO used.

VIII.K.1.b. If, based upon review of the Permittee's request for a permit modification, the results of the site investigations, and other information the Administrative Authority determines that releases or suspected releases from an individual SWMU/AOC which were investigated either are non-existent or do not pose a threat to human health and/or the environment, the Administrative Authority may grant the requested modification.

VIII.K.1.c. In accordance with LAC 33:V.321.C.1.a.ii, the Permittee must notify the facility mailing list within ninety (90) days of the Administrative Authority's approval of the Class 1[1] permit modification request.

VIII.K.2. Facility-Wide NFA-ATT Determination

VIII.K.2.a. Upon the completion of all activities specified in the Risk Management Plan and after all SWMUs and AOCs at the facility have been remediated according to the standards dictated by the selected RECAP MO, the Permittee shall submit a summary report supporting a determination of NFA-ATT on a facility-wide basis.

VIII.K.2.b. The summary report must include a historical narrative for each SWMU/AOC at the site that includes a summary of the investigation, sampling & analysis, remedial, and confirmatory sampling activities leading to the NFA-ATT request. The basis for the determination of NFA-ATT shall follow the guidelines as described in the RECAP (Section 1.2.1 of RECAP) for each AOI, depending on the MO used. The facility-wide NFA-ATT determination must consider any newly-identified SWMUs/AOCs discovered after submittal of the Risk Management Plan.

VIII.K.2.c. The Administrative Authority will review and evaluate the summary report and subsequently either inform the Permittee in writing that the report is acceptable for public review or issue a notice of deficiency.

VIII.K.2.d. If the Administrative Authority determines the summary report does not fully demonstrate that all remedial objectives have been satisfied, the Administrative Authority shall notify the Permittee in writing of the summary report's deficiencies and specify a due date for submittal of a revised summary report.

VIII.K.2.e. After the Administrative Authority has determined the facility-wide NFA-ATT summary report is acceptable for public review, the Administrative Authority shall inform the Permittee in writing and instruct the Permittee to submit the summary report as a Class 3 permit modification request in accordance with the requirements of LAC 33:V.321.C.3.

VIII.K.2.f. After conclusion of a sixty (60) day comment period, the Administrative Authority will either grant or deny the Class 3 permit modification request. In addition the Administrative Authority must consider and respond to all significant comments received during the sixty (60) day comment period.

VIII.K.2.g. If, based upon review of the Permittee's Class 3 permit modification request, the results of the site investigations, confirmatory sampling, and other pertinent information, the Administrative Authority determines that all SWMUs and AOCs have been remediated to the selected MO and no further action at the facility is warranted, the Administrative Authority will grant the modification request.

VIII.K.2.h. If the Class 3 Modification request is granted, the Administrative Authority shall prepare a draft permit incorporating the proposed changes in accordance with LAC 33:V.703.C and solicit public comment on the draft permit modification according to Condition VIII.N.4 of this permit.

VIII.K.2.i. If, after considering all public comments, the Administrative Authority determines that all activities specified in the Risk Management Plan have been completed and that all SWMUs and AOCs have been remediated to the selected MO, the Class 3 permit modification for facility-wide NFA-ATT will receive final approval. The CAS permit conditions will remain a part of the modified permit in the event that the remedial actions taken fail to maintain the established performance standard and to address any SWMUs/AOCs discovered at a later date.

VIII.K.3. Continued Monitoring

If necessary to protect human health and/or the environment, a determination of NFA-ATT shall not preclude the Administrative Authority from requiring continued

monitoring of air, soil, groundwater, or surface water, when site-specific circumstances indicate that releases of hazardous waste or hazardous constituents are likely to occur.

VIII.K.4. Additional Investigations

A determination of NFA-ATT shall not preclude the Administrative Authority from requiring further investigations, studies, or remediation at a later date, if new information or subsequent analysis indicates a release or likelihood of a release from a SWMU/AOC at the facility that is likely to pose a threat to human health and/or the environment. In such a case, the Administrative Authority shall initiate a modification to the Permit according to LAC 33:V.321.

VIII.L. NOTIFICATION REQUIREMENTS FOR AND ASSESSMENT OF NEWLY-IDENTIFIED SWMUs AND POTENTIAL AOCs

VIII.L.1. The Permittee shall notify the Administrative Authority, in writing, of any newly-identified SWMUs and potential AOCs (i.e., a unit or area not specifically identified during previous corrective action assessments, RFA, etc.), discovered in the course of groundwater monitoring, field investigations, environmental audits, or other means, no later than thirty (30) days after discovery. The Permittee shall also notify the Administrative Authority of any newly-constructed land-based SWMUs (including but not limited to, surface impoundments, waste piles, landfills, land treatment units) and newly-constructed SWMUs where any release of hazardous constituents may be difficult to identify (e.g., underground storage tanks) no later than thirty (30) days after construction. The notification shall include the following items, to the extent available:

VIII.L.1.a. The location of the newly-identified SWMU or potential AOC on the topographic map required under LAC 33:V.517.B. Indicate all existing units (in relation to other SWMUs/AOCs);

VIII.L.1.b. The type and function of the unit;

VIII.L.1.c. The general dimensions, capacities, and structural description of the unit (supply any available drawings);

VIII.L.1.d. The period during which the unit was operated;

VIII.L.1.e. The specifics, to the extent available, on all wastes that have been or are being managed at the SWMU or potential AOC; and

VIII.L.1.f. Results of any sampling and analysis required for the purpose of determining whether releases of hazardous waste including hazardous constituents have occurred, are occurring, or are likely to occur from the SWMU/AOC.

VIII.L.2. Based on the information provided in the notification, the Administrative Authority will determine whether or not the area is a newly-identified SWMU or AOC. If the area is determined to be a newly-identified SWMU or AOC, the Administrative Authority will inform the Permittee in writing and request that the Permittee submit a Class 1[1] permit modification request under LAC 33:V.321.C.1 to add the newly-identified SWMU/AOC to Appendix 1, Table 1 of this permit.

Further, the Administrative Authority will determine the need for further investigations or corrective measures at any newly identified SWMU or AOC. If the Administrative Authority determines that such investigations are needed, the Administrative Authority may require the Permittee to prepare a plan for such investigations. The plan for investigation of SWMU or AOC will be reviewed for approval as part of the current CAS Investigation Workplan or a new CAS Investigation Workplan. The results of the investigation of any newly-discovered SWMU/AOC shall be incorporated into the CSM.

VIII.M. NOTIFICATION REQUIREMENTS FOR NEWLY-DISCOVERED RELEASES AT A SWMU OR AOC

The Permittee shall notify the Administrative Authority of any release(s) from a SWMU or AOC of hazardous waste or hazardous constituents discovered during the course of groundwater monitoring, field investigation, environmental auditing, or other means. The notification must be in accordance with the procedures specified in Conditions II.E.16 through II.E.20 of this permit and based upon the nature, extent, and severity of the release. Such newly-discovered releases may be from newly-identified SWMUs or AOCs, newly-constructed SWMUs, or from SWMUs or AOCs for which, based on the findings of the CSM, completed RECAP Report, or investigation of an AOC, the Administrative Authority had previously determined no further investigation was necessary. The notification shall include information concerning actual and/or potential impacts beyond the facility boundary and on human health and the environment, if available at the time of the notification.

The Administrative Authority may require further investigation and/or interim measures for the newly-identified release(s), and may require the Permittee to prepare a plan for the investigation and/or interim measure. The plan will be reviewed for approval as part of the CAS Investigation Workplan or a new CAS Investigation Workplan. The Permit will be modified to incorporate the investigation, according to the Class 1[1] permit modification ([1] requiring Administrative Authority approval) procedures under LAC 33:V.321. The results of the investigation of any newly-identified release(s) shall be incorporated into the CSM.

VIII.N. PUBLIC PARTICIPATION REQUIREMENTS

Public participation is an essential element in the implementation of any corrective action program at the facility. The CAS promotes the early and continued involvement of stakeholders in site remediation activity during permit issuance, renewal, or modification. The public is invited to review and comment on the corrective action requirements contained in any draft permitting decisions or draft permit modification documents and the associated plans and reports submitted by the Permittee. The Administrative Authority reserves the

right to require more extensive public participation requirements based upon site-specific conditions and other relevant factors (e.g., compliance history, potential offsite impact, community interest, etc.). At a minimum, the public participation requirements shall include the following.

VIII.N.1. NFA-ATT Determinations for Specific SWMUs/AOCs

Based on the results of the site investigations, screening, risk evaluations and risk management activities, the Permittee may request a NFA-ATT determination for a specific SWMU/AOC by submittal of a Class 1[1] permit modification request ([1] requiring Administrative Authority approval) under LAC 33:V.321.C.1. The Permittee must notify the facility mailing list within 90 days of the Administrative Authority's approval of the Class 1[1] permit modification request, in accordance with LAC 33:V.321.C.1.a.ii and Condition VIII.K.1.c of this permit.

VIII.N.2. Draft Permitting Decision

The public may review and comment on the terms and conditions of the CAS during the public notice and comment period of the draft permitting decision. The Administrative Authority shall issue public notice upon preparation of the draft permitting decision in accordance with LAC 33:V.715. During the forty-five (45) day public comment period, the Administrative Authority will accept public comments on the draft permitting decision. At the end of the public comment period, the Administrative Authority will consider and address all public comments and make any necessary revisions to the draft permitting decision. After addressing all public comments, the Administrative Authority will issue a public notice for issuance of the final permitting decision. The final permitting decision will include a "Responsiveness Summary" detailing all comments received on the draft permitting decision and the actions taken (if necessary) to correct the draft before issuance of the final permitting decision.

VIII.N.3. Final Remedy Selection

The public may review and comment on the terms and conditions of the Risk Management Plan as described in Conditions VIII.J.4 through VIII.J.7 of this permit. If after addressing all public comments the Administrative Authority determines that the Risk Management Plan is satisfactory, the Administrative Authority will prepare a draft permit modification document in accordance with LAC 33:V.703.C.

The draft permit modification document will include a "Basis of Decision". The "Basis of Decision" will identify the proposed remedy for corrective action at the site and the reasons for its selection, describe all other remedies that were considered, and solicit for public review and comments on the Risk Management Plan included in the draft permit modification document.

After addressing all public comments, the Administrative Authority will issue a public notice for issuance of the final permit modification. The final permit

modification will include a "Responsiveness Summary" detailing all comments received on the draft permit modification and the actions taken (if necessary) to correct the draft before issuance of the final permit modification.

VIII.N.4. Facility-Wide NFA-ATT

Upon the completion of all activities specified in the Risk Management Plan and after all facility remedial objectives have been met, the Permittee may submit a summary report for a determination of NFA-ATT on a facility-wide basis in accordance with Condition VIII.K.2 of this permit. The public may review and comment on the summary report as described in Condition VIII.K.2.b. If after addressing all public comments the Administrative Authority determines that all SWMUs and AOCs have been remediated to the selected MO and no further action at the facility is warranted, the Administrative Authority will prepare a draft permit modification document in accordance with LAC 33:V.703.C.
The draft permit modification document will include a "Basis of Decision". The "Basis of Decision" will provide a summary detailing contamination sources, site investigations, the MO selected for the facility, facility remedial standards, remedial actions, and sampling results demonstrating that the facility remedial standards have been achieved.

After addressing all public comments, the Administrative Authority will issue a public notice for issuance of the final permit modification. The final permit modification will include a "Responsiveness Summary" detailing all comments received on the draft permit modification and the actions taken (if necessary) to correct the draft before issuance of the final permit modification.

Table 1: Corrective Action Strategy Notification and Reporting Requirements

Below is a summary of the major notifications and reports that may be required by the Administrative Authority under the Corrective Action Strategy of this Permit in the event of releases requiring RCRA corrective action. The Administrative Authority will notify the Permittee of the notification and reporting requirements during the scoping meeting or another applicable stage of the corrective action process.

ACTION	DUE DATE
Submit Notice of Intent to request use of the CAS to the Administrative Authority for review and comment (Condition VIII.B.1)	Within sixty (60) days of the effective date of this permit (if facility corrective action is required)
CAS Scoping Meeting held between facility and Administrative Authority (Condition VIII.B.2)	Within sixty (60) days of submittal of the Notice of Intent
Submit Progress Reports on all activities to the Administrative Authority (Condition VIII.C.1)	Schedule to be determined by the Administrative Authority on a case-by-case basis
Make available other reports relating to corrective action to the Administrative Authority (Condition VIII.C.2)	Upon request of the Administrative Authority

Provide briefings to the Administrative Authority (Condition VIII.C.3)	As necessary and upon request by the Administrative Authority
Submit Conceptual Site Model (CSM) (Condition VIII.D) and facility Performance Standards (Condition VIII.A.2) to the Administrative Authority	Within one-hundred and twenty (120) days after the scoping meeting
Perform Interim Measures (Condition VIII.E)	As determined by the Administrative Authority on a case by case basis
Submit Corrective Action Strategy (CAS) Workplan for the facility investigation to the Administrative Authority (Condition VIII.F)	Within one-hundred and eighty (180) days after the CAS Scoping Meeting
Implement site investigation activities under CAS Investigation Workplan according to approved schedule (Condition VIII.G)	Within fourteen (14) days of receipt of approval by the Administrative Authority
Submit RECAP Report to the Administrative Authority (Condition VIII.H)	Within ninety (90) days of completion of the site investigation
Submittal of Remedial Alternatives Study (RAS) to the Administrative Authority (Condition VIII.I)	Within ninety (90) days of completion of approval of the RECAP Report by the Administrative Authority
Submit Risk Management Plan to the Administrative Authority (Condition VIII.J)	Within ninety (90) days of approval of the RAS by the Administrative Authority
Submit requests for unit specific and facility-wide NFA-ATT determinations to the Administrative Authority (Condition VIII.K)	As necessary
Notification of newly-identified SWMUs and potential AOCs (Condition VIII.L)	Thirty (30) days after discovery
Notification of newly-discovered releases (Condition VIII.M)	According to the requirements of Conditions II.E.16 through II.E.20 of this permit

APPENDIX 1: SUMMARY OF CORRECTIVE ACTION ACTIVITIES

The intent of Appendix 1 is to provide an overview of the history and current status of the corrective action process at the site at the time of issuance of the final permit and may not necessarily provide a definitive regulatory determination for a particular SWMU, AOC, or any other onsite area of release. The classification of an individual SWMU, AOC, or any other onsite release area is subject to change by the Administrative Authority based on future site-specific conditions and future available information available to the Administrative Authority.

Site Geological and Hydrogeological Background

The Dow Chemical Company's ("Dow") Plaquemine facility is located on backswamp and lacustrine deposits from the Holocene era with a thin veneer of natural levee deposits. These backswamp and lacustrine deposits occur to a depth of approximately 100 ft below ground surface (bgs) and are composed of soft- to-medium gray clays, silty clays, and clayey silt and silty sand lenses, seams, and layers. Layers of decayed organic material are common in these layers. Below these Holocene deposits is the Plaquemine Aquifer of the Pleistocene era, which is encountered approximately 100 feet below land surface in the area of the Plaquemine facility. The Plaquemine Aquifer consists of medium to coarse sand and gravel that are occasionally overlain by silty sand. The Plaquemine facility is typically described as being underlain by two shallow, low permeable water bearing zones (first pervious zone and second pervious zone) and the deeper underlying aquifer (Plaquemine Aquifer). The first pervious zone is a 10 foot thick zone that occurs at approximately 10 to 20 feet bgs; the deep pervious zone is a 20 foot thick zone that occurs at approximately 40 to 60 feet bgs.

Historical Background

A RCRA Facility Assessment (RFA), dated August 1986, was prepared for EPA Region VI by A.T. Kearney, Inc. The RFA identified 44 units, referred to as Solid Waste Management Units or SWMUs at Dow's Plaquemine facility. SWMUs were grouped into categories based on similarities in location, associated production processes, or similar construction and use. Many of the SWMUs identified in the RFA were or contained units that were interim status units or permitted units managed under the Solid Waste or Hazardous Waste programs. In addition, many of the SWMUs identified in the RFA were designated as requiring neither further investigation nor corrective action at the time the RFA was conducted.

However, the RFA identified several units for which additional information/data, additional investigation, or activities were requested or required. The units included:

- Environmental Operations Area – Surface Impoundments EC-1 (SWMU #1)
- Light Hydrocarbons I, II and III Area – LHC III Surface Impoundment (SWMU #21) and API Separator (SWMU #23)
- Polyethylene B – Closed Surface Impoundment (SWMU #32) and Rainwater Collection Pond (SWMU #33)
- Coal Slurry Production Plant Surface Impoundment (SWMU #34)
- Block 49 Landfill (SWMU #39).

[Note: A complete listing of the SWMUs identified by the 1986 RFA and their respective categories can be found on page 7 of The RFA Report, EDMS Document #22058157.]

None of these units were listed as regulated under RCRA in the RFA. Additionally, the recommended actions for these units were associated primarily with waste stream characterization, regulatory status determination, housekeeping and verification of clean closure through review of existing data. Following the RFA and consistent with the recommendations of the RFA, additional steps were taken by the facility for these identified units.

Though listed as SWMU #39, Block 49 was not identified in the RFA as a site that needed further action under the HSWA amendments to the RCRA program because, as noted in the RFA, it was a site that was being investigated and remediated under a state program. Corrective action activities associated with SWMU #39 (Block 49 Landfill) are ongoing as described below in this appendix.

By the 1980's, Dow, in cooperation with the LDEQ, had initiated voluntary assessments, investigations and corrective action plans to address historical releases at the site. Dow then took steps to incorporate a site-wide approach for corrective action and to facilitate and expedite the corrective action process.

In March 1991, LDEQ and Dow entered into the Groundwater Corrective Action Agreement (GW-89-003). The Groundwater Corrective Action Agreement was entered into by the LDEQ and Dow following the issuance of a previous groundwater corrective action order (GWO-89-003) by LDEQ to Dow on September 26, 1989. The key terms and conditions of Groundwater Corrective Action Agreement GW-89-003 (the completed details of the agreement can be found in EDMS Document #1095105) are summarized below:

1. Requirements that Dow investigate the extent of groundwater contamination for the following:
    - Brine Area
    - PDC Area
    - EDC Product Storage Tank Area
    - Environmental Operations Area
    - Any future release(s) of waste constituents to groundwater at Dow's Plaquemine facility
    - Any future discovery of historical release(s) of waste constituents to groundwater, including those identified by Dow's voluntary plant-wide assessment program.
2. Incorporation of previously approved assessments, investigations, and corrective action plans (to date).
3. Utilizing the best available technology, Dow was to determine the hydrogeology of any and all assessment areas by use of geological cross sections, isopachs, flow models, etc.
4. Determination by Dow of the limits of vertical and horizontal contamination of any and all assessment areas.

5. Following LDEQ approval of Dow's onsite environmental assessments, requirement that Dow conduct Remedial Investigation and Feasibility Studies (RI/FS) for any areas not under LDEQ-approved corrective action.
6. Requirement that Dow monitor and evaluate each corrective action for effective plume management on a quarterly basis and summarize the results in a quarterly report to be submitted to LDEQ by January 31, April 30, July 31, and October 31 of each calendar year.

The various onsite releases at Dow's Plaquemine facility have historically been managed under various enforceable documents due to differences in: dates of release discovery; completion dates for assessment investigations; and the nature and extent of the releases. As a result, Dow's site-wide corrective action program as overseen by LDEQ has not mirrored the traditional RCRA corrective action approach. Steps were taken by Dow and the LDEQ to approach and implement corrective action in a progressive and expedited manner. Therefore, while various elements of the traditional RCRA corrective action approach such as the RCRA Facility Investigation (RFI) and Corrective Measures Study (CMS) have not been conducted, corrective actions were undertaken pursuant to enforceable documents that govern the execution, maintenance, and reporting of the corrective action activities at the site and address investigation, assessment, and remedy implementation. These enforceable documents include: the Hazardous Waste Operating Permit; the Groundwater Corrective Action Agreement; the Northwest Landfill/Corrective Action Management Unit Permit; and numerous LDEQ-approved assessment and corrective action plans.

The use of multiple enforceable documents has resulted in the use of different terminology being used to name and categorize the various release areas. Release area categories include: **SWMUs** (as described in the 1986 RFA and 1989 Hazardous Waste Operating Permit); **Groundwater Corrective Action Agreement Sites** (as described in or subject to the 1991Groundwater Corrective Action Agreement); and **Corrective Action Sites** (release areas discovered under Dow's voluntary plant-wide assessment program and managed under and/or subject to although not specifically named in the 1991 Groundwater Corrective Action Agreement). Below, a brief description of each release area is provided. The release areas are grouped according to release categories as noted above.

SWMUs

The 700 Railyard

This area (identified as a SWMU) is located between two sets of railroad tracks. The 700 Railyard site was once used as a temporary holding area for solid and hazardous waste. The 700 Railyard was identified in April 1990 and it contained two discrete disposal areas containing debris such as concrete and chlorine cells. Investigations in the area of the 700 Railyard also confirmed the presence of hexachlorinated organic compounds.

Area investigations identified the nature and extent of contamination. The impacted area was determined to include soil between depths of 1 to 4 feet below ground surface in a 1.5 acre area and soils to a depth of 8 feet at one location within this

defined area. Constituents of concern (COCs) included several volatile and semi-volatile chlorinated organic compounds.

Dow implemented the "700 Railyard Corrective Action Plan" that provided for the excavation of contaminated soil, subsequent backfilling of the area with uncontaminated soil, and disposing of contaminated soil in the permitted Corrective Action Management Unit (CAMU) under Permit Number LAD 008187080-CAMU-1 which became effective on June 3, 2002. Under the aforementioned CAMU permit, Dow's onsite Northwest Landfill received excavated remediation wastes and was re-designated as the Northwest Landfill/CAMU.

Concentrations of COCs remaining at the 700 Railyard are below the site-specific limiting RECAP standards. Based upon the data presented in the October 2005 "700 Railyard Corrective Action Plan Implementation Report", the LDEQ issued a No Further Action determination for the 700 Railyard in correspondence dated June 18, 2007.

Block 49

This area (identified as a SWMU) is an inactive landfill site located within Block 49 of Dow's Plaquemine facility. The landfill contains:

- Heavy bottom tars from Solvents and Vinyl I
- Chlorinated polyethylene
- Methylcellulose pulp
- Waste Oil
- Chlorine taffy
- Mercury contaminated soil

Investigations of this area were conducted in October 1983, February 1985, and January 1986 and resulted in the following conclusions:

- Confirmed shallow soil contamination up to 250 feet out from perimeter of the landfill
- The extent of vertical migration extended to as much as 37 feet from the bottom of the disposal cells
- No evidence of contamination of the Plaquemine Aquifer
- Free phase liquid organic contamination was present in the soil beneath the disposal pits

Dow is implementing the approved "Remedial Action Plan" for Block 49 which provides for: 1) containment of lateral and vertical movements of contaminants and 2) recovering and disposing of contaminants through the operation of a recovery well system including 5 horizontal recovery wells. Under the ongoing corrective action remedy, organics are thermally destroyed in the onsite Solvents Incinerator and the water is treated before being discharged through an NPDES outfall. The

implementation of the Block 49 "Remedial Action Plan" is ongoing. Dow reports corrective action activities relative to Block 49 in the Groundwater Corrective Action Agreement quarterly reports.

Corrective Action Sites

Lighthouse Road

The Lighthouse Road site is located on Dow's property within the batture of the Mississippi River and the impacted area at this site was determined to extend from approximately 70 feet east of the toe of the Mississippi River levee eastward, terminating more than 90 feet west of the Mississippi River channel. The Lighthouse Road site was the subject of numerous investigations performed from 1986 to 1993. Dow submitted the "Lighthouse Road RECAP Assessment and Corrective Action Plan" (including NOD responses) in January 2004 and the plan was approved by LDEQ and USEPA in correspondence dated May 5, 2004. The terms and conditions of the CAMU Permit LAD 008187080-CAMU-1 allowed for soils excavated from the Lighthouse Road area (and also 700 Railyard) to be disposed of in the Northwest Landfill/CAMU. Excavation activities at Lighthouse Road began in September 23, 2004.

Corrective action activities at Lighthouse Road included excavation of contaminated soil, pre-excavation soil sampling and analysis, post-removal soil confirmation sampling and analysis, and post-remediation shallow groundwater sampling and analysis. Dow submitted the "Lighthouse Road Corrective Action Plan Implementation Report" that addressed the results of corrective action activities performed at the site on March 1, 2007. Based upon the data presented in the "Lighthouse Road Corrective Action Plan Implementation Report", the LDEQ issued a No Further Action (for soils only) determination for Lighthouse Road in correspondence dated June 20, 2008.

Dow performed sampling of multiple depths of the Plaquemine Aquifer around the excavation. Data from this sampling was submitted in a document titled "Supplemental Groundwater Sampling in the Vicinity of the Lighthouse Road Site" dated March 1, 2007. Volatile organic compounds were detected above the maximum contaminant levels (MCLs).

Chlorine Plant

The Chlorine Plant is an area that included a hazardous waste surface impoundment that was closed in 1987. The surface impoundment's monitoring wells indicated elevated chloride levels. The area surrounding the surface impoundment was assessed in September 1988 utilizing conductivity cone penetrometer soundings. The "Brine Assessment and Remediation Plan" was submitted in October 1989 and was approved by LDEQ in March 1990.

A groundwater recovery system was installed and began operating in December 1990. The recovery system consists of seven recovery wells in the shallow pervious zone. Recovered groundwater is routed to Dow's brine treatment system and is utilized in the production of chlorine. The recovery system was shut down in February 2003 (for maintenance) and, as agreed to by LDEQ, will remain out of operation as LDEQ evaluates the "RECAP Low-Level Contamination Areas Human Health Risk Assessment" report that addresses this and several other release areas. Four (4) monitoring wells in the Chlorine Plant area are sampled semi-annually (one of the wells is sampled quarterly) and analyzed for chlorides. Dow reports corrective action activities related to the Chlorine Plant in the Groundwater Corrective Action Agreement quarterly reports.

Groundwater Corrective Action Agreement Sites

PDC Spill Sites #1 & #2

Two (2) historic propylene dichloride (PDC) releases from isolated railcar incidents resulted in remedial activities being required at PDC Spill Sites #1 and #2. Over 21 million pounds of PDC contaminated soils were excavated and incinerated onsite as a result of the spills. Incineration of contaminated soil was completed in October 1989. French drain systems were installed at both sites and recovered groundwater was steam stripped. Under the ongoing corrective action remedy, recovered groundwater is steam stripped. Dow has received LDEQ approval to close both French drain collection systems at Site #1 and Site #2.

Site #1 is located within the area referred to as Priority Area 1 (in the "Priority Areas 1 & 2 and Vinyl II Corrective Action Plan" submitted in June 1994). In accordance with the approved corrective action plan, 14 horizontal recovery wells were constructed and put into operation on December 13, 1996 and Dow ceased recovery efforts at Site #1 French drains on October 30, 1997.

Implementation of the corrective action remedy is ongoing for Site #1, as Dow continues to operate the Site #1 horizontal recovery well system in the area that includes Site #1. The groundwater monitoring reports for PDC Spill Site #1 have been consolidated with Priority Areas 1 & 2 in the Groundwater Corrective Action Agreement quarterly reports.

Site #2 is located southwest of Block 80 near the railyard. A closure plan for the French drain collection system at Site #2 was submitted on May 11, 1993, and was approved by the LDEQ on August 27, 1993. The Site #2 closure was completed during October 1993.

Environmental Operations Plant Chloride Site

Historical chloride contamination resulting from the earlier operation of the EC-1 Solid Waste Surface Impoundment was confirmed during the subsurface investigation conducted in October and November 1986 in the vicinity of the Environmental

Operations Plant (EOP). The purpose of the investigation was to delineate the extent of chloride contamination in the shallow soils around the impoundment. Elevated conductivity readings were observed in the shallow pervious zone on the southeast (Dow coordinates) side of the impoundment where the piping, valves and pumps were located.

Under the "Chloride Remediation Plan", submitted to LDEQ in March 1988, three chloride recovery wells were installed in 1989. As has been reported to and discussed with LDEQ, the three recovery wells are currently inactive and inoperable. The wells remain inactive pending LDEQ's evaluation of the "RECAP Low-Level Contamination Areas Human Health Risk Assessment" report. Dow reports corrective action activities related to the Environmental Operations Plant Chloride Site in the Groundwater Corrective Action Agreement quarterly reports.

Vinyl II Plant (EDC Storage Tank Area)

In May 1989, ethylene dichloride (EDC) was detected in a subsurface drainage pipe beneath the Vinyl II Plant. The area assessment delineated the extent of the plume and confirmed that the source of contamination was two (2) EDC storage tanks. Under the "Vinyl II Remediation Plan" submitted to LDEQ in June 1989 and revised in June 1990, a series of vertical recovery wells were installed and began operating in June 1991.

Additional assessment was conducted during Dow's voluntary facility-wide groundwater assessment investigation. Upon completion of the aforementioned groundwater assessment, Dow submitted the "Priority Areas 1 & 2 and Vinyl II Corrective Action Plan" to LDEQ in June 1994. The plan proposed the installation of four horizontal recovery wells and a French drain and which would replace the existing remediation system. The "Priority Areas 1 & 2 and Vinyl II Corrective Action Plan" was approved by LDEQ in December 1994. The Vinyl II remediation system (four horizontal wells and French drain) began operation in the 3rd quarter 1995. Under the ongoing corrective action remedy, organics are thermally destroyed in the onsite Solvents Incinerator and the water is treated before being discharged through an NPDES outfall.

Dow also utilizes four monitoring wells at the Vinyl II Plant to monitor both the shallow and deep pervious zones. The wells are sampled quarterly and the results are included in the Groundwater Corrective Action Agreement quarterly reports.

Priority Areas 1 & 2

Dow's voluntary facility-wide groundwater assessment investigation confirmed organic contamination in the area of Dow's Plaquemine facility designated as Priority Areas 1 & 2. Priority Areas 1 & 2 encompass the following plants at Dow's Plaquemine facility:

- Glycol I

- Solvents
- EDC I
- Chlorine
- R&D
- Tank Farm I
- Polyethylene A

Releases were the result of past practices and a perchlorethylene spill which occurred in December 1993. Dow submitted the "Priority Areas 1 & 2 and Vinyl II Corrective Action Plan" to LDEQ in June 1994. The plan was approved by LDEQ in December 1994. Fourteen horizontal recovery wells were installed in Priority Areas 1 & 2 and the recovery system began operating in December 1996. Implementation of the Priority Areas 1 & 2 corrective action remedy is ongoing. Dow reports corrective action activities related to Priority Areas 1 & 2 in the Groundwater Corrective Action Agreement quarterly reports.

Phase II Mid-Plant Area

Dow's voluntary facility-wide groundwater assessment investigation confirmed organic contamination in the area of Dow's Plaquemine facility designated as the Phase II Mid-Plant Area. The Phase II Mid-Plant Area consists of the following blocks or plants within Dow's Plaquemine facility:

- LGTI
- Light Hydrocarbons III
- Methanes
- Naptha Storage
- Railroad Tank Car Cleaning Area

The contamination in these areas of Dow's Plaquemine facility is attributed to past activities within the production plants, material staging areas, and equipment cleaning areas. Dow submitted the "Phase II Corrective Action Plan" to LDEQ in December 1995. This plan addressed contaminated areas not previously addressed in the "Priority Areas 1 & 2 and Vinyl II Corrective Action Plan" and was approved by LDEQ in March 1996. As stipulated in the plan, Dow installed seven horizontal recovery wells and two French drains. The horizontal recovery wells were installed by the 2nd quarter of 1996 and the French drains were installed by the 4th quarter of 1997. Following the installation of all ancillary equipment, the recovery system began operation in late 1998. Implementation of the Phase II Mid-Plant Area corrective action remedy is ongoing. Dow reports corrective action activities related to the Phase II Mid-Plant Area in the Groundwater Corrective Action Agreement quarterly reports.

The RECAP Low-Level Contamination Areas Human Health Risk Assessment

Utilizing a facility-wide approach to risk-based remediation, Dow submitted the "RECAP Low-Level Contamination Areas Human Health Risk Assessment" to LDEQ in October 2001.

The risk assessment addressed areas of low-level contamination not otherwise addressed by active remediation or pending corrective action plans and was also submitted to meet one of the requirements of the "Priority Areas 1 & 2 and Vinyl II Corrective Action Plan" and the "Phase II Corrective Action Plan". It was revised in May 2005 and was supplemented in August 2006.

The low-level contamination areas addressed by the "RECAP Low-Level Contamination Areas Human Health Risk Assessment" include:

- Block 29 Caustic Plant
- Block 45 Cellulose Plant
- Block 26 Chlorine Plant
- Block 36 Chlor-Alkali II Plant
- Block 19 Chlorinated Polyethylene Plant
- Block 80 Environmental Operations Plant
- Block 30 Equipment Yard
- Block 53 Glycol II Plant
- Block 55 Glycol Ethers Plant
- Blocks 38 & 39 Light Hydrocarbons I Plant
- Block 9 Polyethylene B Plant
- Block 28 Power I Plant
- Block 37 Power II Plant
- Block 25 Research & Development Plant
- Block 70 Storage and Handling Plant

The supplemented report also includes information about 13 additional areas which were investigated as part of the facility-wide groundwater assessment as follows:

- Block 56 Cell Service Area
- Block 89 Sand Blast Area
- Block 65 Slag Area
- Block 41 Stock Area
- Block 120 Tankfarm II
- Block 43 Vector Plant
- Block 35 Environmental Services Block
- Block 41 Fire Training Area
- Block 18 Water Treatment Plant
- Block 48 Light Hydrocarbons II Plant
- Block 83 Pipeline Administrative Area
- Block 13 Plantation House Area
- Block 86 Poly C Plant

Several of the low-level contamination areas did not require evaluation under RECAP, and in many cases, the RECAP evaluation did not result in the identification of COCs. In areas where COCs were identified, the COCs varied by area and included volatile constituents, semi-volatile constituents, and chlorides.

Summary and Status of Release Areas with Ongoing Corrective Action Activities

Corrective action activities are ongoing for the release areas (SWMUs, Groundwater Corrective Action Agreement Sites, and Corrective Action Sites) described below. After COC concentrations in impacted environmental media within the boundaries or a particular release area fall below applicable RECAP standards (a period of performance monitoring may be required), Dow may submit a Class1[1] permit modification requesting a NFA-ATT determination for the specific release area. If the LDEQ determines the request for a NFA-ATT determination satisfies all applicable criteria, LDEQ will render a NFA-ATT determination and the termination of corrective action activities for the specific release area. Subsequent performance monitoring may be required to assure the long-term efficacy of corrective action.

Block 49 Landfill (SWMU): The corrective action remedy has been implemented in accordance with the Block 49 Landfill "Remedial Action Plan". The selected corrective action remedy is the recovery of hazardous organic constituents from groundwater via a system of recovery wells. Organics are thermally destroyed in the onsite Solvents Incinerator and the water is treated before being discharged through an NPDES outfall. The implementation of the corrective action remedy corresponds to the implementation of the Risk Management Plan in the CAS process. Organic contaminated groundwater continues to be recovered from the recovery well system. Dow must continue to implement, maintain, and monitor the performance of the selected corrective action remedy.

Chlorine Plant (Corrective Action Site): The corrective action remedy has been implemented in accordance with the Chlorine Plant "Brine Assessment and Remediation Plan". The selected corrective action remedy is the recovery of chloride contamination via a system of recovery wells. Recovered groundwater is routed to Dow's brine treatment system and is utilized in the production of chlorine. The implementation of the corrective action remedy corresponds to the implementation of the Risk Management Plan in the CAS process. The recovery system was shut down in February 2003 (for maintenance) and, as agreed to by LDEQ, will remain out of operation as LDEQ evaluates this and several other release areas. Four (4) monitoring wells in the Chlorine Plant area are sampled semi-annually and analyzed for chlorides. The "RECAP Low-Level Contamination Areas Human Health Risk Assessment" report has, to date, not been approved by LDEQ.

PDC Spill Sites #1 & #2 (Groundwater Corrective Action Site): The corrective action remedy has been implemented in accordance with the "Priority Areas 1 & 2 Corrective Action Plan". Under the approved corrective action plan, 14 horizontal recovery wells were constructed and put into operation on December 13, 1996 and Dow ceased recovery efforts at the Site #1 French drains on October 30, 1997. Implementation of the corrective action remedy is ongoing for Site #1, as Dow continues to operate the horizontal recovery wells in the area that includes Site #1.

The implementation of the corrective action remedy corresponds to the implementation of the Risk Management Plan in the CAS process. Under the ongoing corrective action remedy for *Site #1*, organics are thermally destroyed in the onsite Solvents Incinerator and the water is treated before being discharged through an NPDES outfall.

Environmental Operations Plant Chloride Site: The corrective action remedy has been implemented in accordance with the "Chloride Remediation Plan". The implementation of the corrective action remedy corresponds to the implementation of the Risk Management Plan in the CAS process. Under the "Chloride Remediation Plan", submitted to LDEQ in March 1988, three chloride recovery wells were installed in 1989. The three recovery wells are currently inactive and inoperable. The wells remain inactive pending LDEQ's evaluation of the "RECAP Low-Level Contamination Areas Human Health Risk Assessment" report. The "RECAP Low-Level Contamination Areas Human Health Risk Assessment" report has, to date, not been approved by LDEQ.

Vinyl II Plant: The corrective action remedy has been implemented in accordance with the "Priority Areas 1 & 2 and Vinyl II Corrective Action Plan". Under the "Priority Areas 1 & 2 and Vinyl II Corrective Action Plan", four horizontal recovery wells and a French drain were installed. The implementation of the corrective action remedy corresponds to the implementation of the Risk Management Plan in the CAS process. Under the ongoing corrective action remedy, organics are thermally destroyed in the onsite Solvents Incinerator and the water is treated before being discharged through an NPDES outfall.

Priority Areas 1 & 2: The corrective action remedy has been implemented in accordance with the "Priority Areas 1 & 2 and Vinyl II Corrective Action Plan". The implementation of the corrective action remedy corresponds to the implementation of the Risk Management Plan in the CAS process. As specified in the "Priority Areas 1 & 2 and Vinyl II Corrective Action Plan", fourteen horizontal recovery wells were installed in Priority Areas 1 & 2 and the recovery system began operating in December 1996. Under the ongoing corrective action remedy, organics are thermally destroyed in the onsite Solvents Incinerator and the water is treated before being discharged through an NPDES outfall.

Phase II Mid-Plant Area: The corrective action remedy has been implemented in accordance with the "Phase II Corrective Action Plan". The implementation of the corrective action remedy corresponds to the implementation of the Risk Management Plan in the CAS process. Under the "Phase II Corrective Action Plan", Dow installed seven horizontal recovery wells and two French drains. The recovery system began operation in late 1998. Under the ongoing corrective action remedy, organics are thermally destroyed in the onsite Solvents Incinerator and the water is treated before being discharged through an NPDES outfall.

Additional SWMU/AOC/Release Area Information or Data to Be Provided by Permittee

In order to reconcile historical and ongoing onsite corrective action activities with the 1986 RFA, Dow must provide response information demonstrating that comments included in the RFA have been adequately addressed for the following SWMUs: #1, #2, #21, #23, #32, #33, and #34. [Note: corrective action activities associated with SWMU #39 (Block 49 Landfill) are ongoing as previously described in this appendix.]

Additional CAS-Related Corrective Action Submittals and Requirements

Utilization of the CAS process to manage onsite corrective action activities has necessitated the need for additional submittals to be provided by Dow to LDEQ as well as revisions to the current onsite corrective action program to meet CAS requirements. These additional submittals and requirements are noted below:

- A Notice of Intent (as described in Condition VIII.B.1) must be submitted within sixty (60) days of the effective date of this permit.
- A Scoping Meeting (as described in Condition VIII.B.2) between Dow and LDEQ must be conducted within sixty (60) days of the submittal of the Notice of Intent.
- A Conceptual Site Model (CSM) must be submitted within one-hundred and twenty (120) days after the Scoping Meeting.
- Performance standards specifying site-wide and area-specific corrective action objectives must be established in accordance with Conditions VII.A.2.a-c of this permit. Deadline date to be determined after the Scoping Meeting has been held and the CSM has been submitted.
- Procedures must be developed and implemented to assess the efficacy of the selected corrective action remedy or remedies (e.g., remedy performance monitoring and performance reviews). Deadline date to be determined after the Scoping Meeting has bee held and the CSM has been submitted.

TABLE 1, SUMMARY OF CORRECTIVE ACTION ACTIVITIES

SWMU or Release Area Number/ Name	*AOC/SWMU/Release Area Description*	*Status of CA Activity*	*Corrective Action*	*EDMS Document ID# / Approval Date*
The 700 Railyard (SWMU)	This SWMU has been remediated. COC concentrations remaining at the 700 Railyard are below the site specific limiting RECAP standards.	NFA-ATT Corrective action activities have been terminated.	Excavation of contaminated soil, disposal of excavated contaminated soil in the NWLF/CAMU, and backfilling of area with uncontaminated soil.	LDEQ issued a No Further Action determination: 06/18/2007 #36063112
Block 49 Landfill (SWMU)	This SWMU is an inactive landfill located within Block 49 of Dow's Plaquemine facility with free phase liquid organic contamination present in the soil beneath the disposal pits.	Implementation of the corrective action remedy is ongoing.	Recovery well system, steam stripping of recovered groundwater, and thermal treatment of organic contaminants.	Remedial Action Plan:12/12/86 #1048658 LDEQ approval: 3/12/87 # 1047243
Lighthouse Road (Corrective Action Site)	This release area is located on Dow's property and within the batture of the Mississippi River. Contaminated soils were excavated and placed in the NWLF/CAMU. Remediation of contaminated soils was managed under the Lighthouse Road RECAP Assessment and Corrective Action Plan approved by LDEQ and EPA. Dow performed sampling of multiple depths of the Plaquemine Aquifer around the excavation. The "Supplemental Groundwater Sampling in the Vicinity of the Lighthouse Road Site" dated March 1, 2007 indicated volatile organic compounds were detected above the maximum contaminant levels (MCLs).	Soil – NFA-ATT Corrective action activities associated with the remediation of contaminated soils have been completed. Contamination of the Plaquemine Aquifer in the vicinity of the Lighthouse Road Site has not yet been addressed.	Excavation of contaminated soil, disposal of excavated contaminated soil in the NWLF/CAMU, and backfilling the area with uncontaminated soil.	Following its review of the Lighthouse Road Corrective Action Implementation Report LDEQ issued a No Further Action determination for soils: 06/20/2008 #37067945 LDEQ approval of Supplemental Groundwater Sampling Plan 05/05/04 #31584422 Supplemental Groundwater Sampling in the Vicinity of the Lighthouse Road Site" 03/01/07 #35781349 .

SWMU or Release Area Number/ Name	*AOC/SWMU/Release Area Description*	*Status of CA Activity*	*Corrective Action*	*EDMS Document ID# / Approval Date*
Chlorine Plant (Corrective Action Site)	The Chlorine Plant is a release area exhibiting elevated chloride concentrations in shallow groundwater. The area included a hazardous waste surface impoundment that was closed in 1987. Remediation is managed under the Brine Assessment and Remediation Plan.	The operation of the recovery well system has been temporarily terminated while LDEQ considers the RECAP Low-Level Contamination Areas Human Health Risk Assessment.	Recovery well system. Recovered groundwater is routed to the brine treatment system and is utilized in the production of chlorine.	Brine Assessment and Remediation Plan: 10/5/89 #1045436 LDEQ approval: 03/08/90 #1048857
PDC Spill Sites #1 & # 2 (Groundwater Corrective Action Agreement Site)	Two (2) distinct propylene dichloride (PDC) release areas resulting from railcar incidents. Site #1 is located in Priority Area 1. Site #2 is located southwest of Block 80. The remediation of PDC Spill Sites #1 and #2 were managed under the Priority Areas 1 & 2 and Vinyl II Corrective Action Plan.	Over 21 million pounds of contaminated soils were excavated and incinerated onsite in the RCRA permitted rotary kiln. The French drains at Sites #1 and #2 have been closed (with LDEQ approval). Site #1: the implementation of the corrective action remedy (recovery well system) is ongoing under the Priority Areas 1 & 2 and Vinyl II Corrective Action Plan. Site #2: Corrective action activities have been terminated.	Site #1 - Excavation and incineration of contaminated soil and the installation and operation of a French drain and the subsequent installation and operation of a horizontal recovery well system. Site #2 - Excavation and incineration of contaminated soil and the installation of a French drain.	Priority Areas 1 & 2 and Vinyl II Corrective Action Plan: 6/17/94 #563064 LDEQ Approval: 12/12/94 #1042158 LDEQ approval of termination of corrective action activities at Site #2: 08/27/93 #1094975

SWMU or Release Area Number/ Name	*AOC/SWMU/Release Area Description*	*Status of CA Activity*	*Corrective Action*	*EDMS Document ID# / Approval Date*
Env. Operations Plant (Groundwater Corrective Action Agreement Site)	An area of chloride contamination in an area in the vicinity of the Environmental Operations Plant. Remediation is managed under the Chloride Remediation Plan.	The operation of the recovery well system has been temporarily terminated while LDEQ considers the RECAP Low-Level Contamination Areas Human Health Risk Assessment.	Recovery well system.	Chloride Remediation Plan: 03/29/88 # 1108349 LDEQ Approval 3/08/90 #1048857
Vinyl II – EDC Storage Tank Area (Groundwater Corrective Action Agreement Site)	An area of EDC contamination resulting from a leak in two (2) EDC storage tanks. Remediation is managed under the Priority Areas 1 & 2 and Vinyl II Corrective Action Plan.	The implementation of the horizontal recovery well system is ongoing under the Priority Areas 1 & 2 and Vinyl II Corrective Action Plan.	The installation and operation of a French drain and a horizontal recovery well system.	Priority Areas 1 & 2 and Vinyl II Corrective Action Plan: 6/17/94 #563064 LDEQ Approval: 12/12/94 #1042158
Priority Areas 1 & 2 (Groundwater Corrective Action Agreement Site)	Priority Areas 1 and 2 contain several blocks or plants operating at the Plaquemine facility (see unit description). Within the boundaries of Priority Areas 1 and 2, are several releases areas that were the result of past operation practices. Remediation is managed under the Priority Areas 1 & 2 and Vinyl II Corrective Action Plan.	The implementation of the horizontal recovery well system is ongoing under the Priority Areas 1 & 2 and Vinyl II Corrective Action Plan.	The installation and operation of a French drain and a horizontal recovery well system.	Priority Areas 1 & 2 and Vinyl II Corrective Action Plan: 6/17/94 #563064 LDEQ Approval: 12/12/94 #1042158
Phase II Mid-Plant Area (Groundwater Corrective Action Agreement Site)	The Phase II Mid-Plant Area contains several blocks or plants operating at the Plaquemine facility (see unit description). Within the boundaries of Phase II Mid-Plant Area are several releases areas that were the result of past operation practices.	The implementation of the horizontal recovery well system is ongoing under the Phase II Corrective Action Plan.	The installation and operation of a French drains and horizontal recovery well system.	Phase II Corrective Action Plan: 12/12/95 #22893184 LDEQ Approval: 3/25/96 #1042718

SWMU or Release Area Number/ Name	*AOC/SWMU/Release Area Description*	*Status of CA Activity*	*Corrective Action*	*EDMS Document ID# / Approval Date*
(continued) Phase II Mid-Plant Area (Groundwater Corrective Action Agreement Site)	Remediation is managed under Phase II Corrective Action Plan.			
Areas addressed by RECAP Low-Level Contamination Areas Human Health Risk Assessment	Dow submitted the "RECAP Low-Level Contamination Areas Human Health Risk Assessment" to LDEQ in October 2001. The risk assessment addressed areas of low level contamination not otherwise addressed by active remediation or pending corrective action plans. It was revised in May 2005 and was supplemented in August 2006. LDEQ last issued a notice of deficiency (NOD) for the report dated April 24, 2008.	RECAP Report submitted; NOD pending	TBD*	RECAP Low-Level Contamination Areas Human Health Risk Assessment: 10/25/01 Low-Level Contamination Areas RECAP: 05/23/05 Supplemental Information Low-Level Contamination Areas RECAP: 08/10/06 LDEQ Notice of Deficiency: 04/24/08

* "To Be Determined" – The need for corrective action will be determined through the Risk Evaluation Corrective Action Program.

ATTACHMENT 1

ATTACHMENT 1
LIST OF FACILITY DOCUMENTS INCORPORATED IN THE PERMIT BY REFERENCE
LAD008187080-OP-1-RN-1
AI#1409

DOCUMENT TYPE	DOCUMENT DATE	ELECTRONIC DATABASE MANAGEMENT SYSTEM (EDMS) DOCUMENT ID	COMMENTS
Arrangement with local authorities	05/13/2005	32874188	Hazardous Waste Permit Renewal Application; Volume 2; Exhibit 7; Section 6.5; pages 73-74 of the EDMS Document 32874188
Waste Analysis Plan	12/18/2007	36482307	Response to NOD1, pages 167-334 of the EDMS Document 36482307
Contingency Plan	12/03/2007	36455532	Contingency Plan Revision; Volume 2; Exhibit 7; pages 1-29 of the EDMS Document 36455532
Security Plan	05/13/2005	32874188	Hazardous Waste Permit Renewal Application; Volume 2; Exhibit 5; pages 12-17 of the EDMS Document 32874188
Personnel Training Plan[1]	05/13/2005 12/18/2007	32874188 36482307	Hazardous Waste Permit Renewal Application; Volume 2; Exhibit 4; pages 6-11 of the EDMS Document 32874188 Response to NOD1, pages 148-153 of the EDMS Document 36482307
Inspection Plan and Schedule[1]	05/13/2005 12/18/2007	32874288 36482307	Hazardous Waste Permit Renewal Application; Volume 2; Exhibit 11; Attachment D, page 49 of the EDMS Document 32874288 Response to NOD1, pages 344-353 and 456-457 of the EDMS Document 36482307
Groundwater Detection Monitoring Plan[1]	05/13/2005 12/18/2007 05/28/2008	32874188 36482307 36925743	Hazardous Waste Permit Renewal Application; Volume 7; Exhibit 13; pages 84-94 and 99-181 of the EDMS Document 32874188 Response to NOD1, page 415-416 and 459 of the EDMS Document 36482307 Response to NOD2, pages 22-27 of the EDMS Document 36925743
Landfill Operation, Design, and Material Specifications[1]	05/13/2005 12/18/2007	32874188 36482307	Hazardous Waste Permit Renewal Application; Volume 5; Exhibit 10; pages 6-80 and 87-116 of the EDMS Document 32874188 Response to NOD1, pages 385-409 and of the EDMS Document 36482307
Closure Plans[1]	05/28/2008	36925743	Response to NOD2; pages 107-115 (Block80 HWLF), pages 116-139 (CSAs A, B, C, D, and E), pages 140-157 (F-700 Incinerator), pages 158-174 (R-4 Boiler), pages 175-192 (F-410 and F-420 Boilers), pages 193-209 (R-750 Boiler), pages 210-236 (Vinyl II Tanks), pages 237-267 (Solvents/EDC Hazardous Waste Storage Tanks), and pages 268-288 (Chlorinated Methanes Tanks) of the EDMS Document 36925743

DOCUMENT TYPE	APPLICATION /DOCUMENT DATE	ELECTRONIC DATABASE MANAGEMENT SYSTEM (EDMS) DOCUMENT ID	COMMENTS
Remediation Plan – Northwest Landfill	8/27/1991	1093380	Pages 1-12 (of 12) of the EDMS Document 1093380
Closure Cost Estimates[1]	05/28/2008	36925743	Response to NOD2; page 113 (Block 80 HWLF) pages 127-131 (CSAs A, B, C, D, and E), page 149 (F-700 Incinerator), page 167 (R-4 Boiler), pages 184-185 (F-410 and F-420 Boilers), page 202 (R-750 Boiler), pages 222-224 (Vinyl II Tanks), pages 251-257 (Solvents/EDC Hazardous Waste Storage Tanks), and pages 280-282 (Chlorinated Methanes Tanks) of the EDMS Document 36925743
Post-Closure Plan[1]	05/13/2005 12/18/2007 05/28/2008	32874288 36482307 36925743	Hazardous Waste Permit Renewal Application; Volume 5; Exhibit 10; Attachment E; pages 85-86 of the EDMS Document 32874188 Response to NOD1, page 456-457 and 459 of the EDMS Document 36482307 Response to NOD2; page 113 (Block 80 HWLF) of the EDMS Document 36925743
Post-Closure Cost Estimates[1]	05/13/2005 05/28/2008	32874188 36925743	Hazardous Waste Permit Renewal Application; Volume 5; Exhibit 10; Attachment C; page 136 (NWLF/CAMU) of the EDMS Document 32874188 Response to NOD2; pages 114-115 (Block 80 HWLF),
Groundwater Corrective Action Agreement (GW-08-93)	03/12/1991	1095105	Pages 1-10 (of 10) of the EDMS Document 1095105

[Note: Revisions addressing pages, sections, drawings, etc. shall supersede equivalent pages, sections, drawings, etc. included in previous document submittals.]

1 The Permittee shall submit whole and complete revisions of these documents and plans as a Class 1[1] permit modification request as required by Condition II.E.25 of this permit. The revisions shall incorporate all revisions required during the permit application review process and/or outstanding Administrative Authority comments relating to the documents. This table will be modified upon approval of the Class 1[1] permit modification by the Administrative Authority.